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ANNUAL REPORT

OF THE

DEPARTMENT OF AGRICULTURE

OF THE

PROVINCE OF ALBERTA

1912

PRINTED BY ORDER OF THE LEGISLATIVE ASSEMBLY

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DEPARTMENT OF AGRICULTURE,
EDMONTON, February 24, 1913.

To His Honour
GEORGE HEDLEY VICARS BULYEA,
Lieutenant Governor of the Province of Alberta.

SIR,—

I have the honour to submit herewith the Report of the Department of Agriculture for the year 1912.

I have the honour to be, Sir,
Your obedient servant,

DUNCAN MARSHALL,
Minister of Agriculture.

REPORT

OF THE

DEPARTMENT OF AGRICULTURE

DEPARTMENT OF AGRICULTURE,
EDMONTON, February 25, 1913.

HON. DUNCAN MARSHALL,
Minister of Agriculture.

SIR,—I have the honour to submit herewith a report covering the work of the various branches of the Department of Agriculture for the year 1912. For convenience the report is arranged as follows:

1. Report of the Deputy Minister.
2. Report of the Dairy Commissioner.
3. Report of the Superintendent of Seed and Weed Branch.
4. Report of the Game and Fire Guardian.
5. Report of the Poultry Superintendent.
6. Report of the Recorder of Brands.
7. Report of the Superintendent of Fairs and Institutes.
8. Report of the Live Stock Commissioner.
9. Report of the Provincial Medical Officer of Health.
10. Report of the Provincial Sanitary Engineer.
11. Report of the Director of the Provincial Laboratory.
12. Report of the Publicity Bureau.
13. Report of the Superintendent of Demonstration Farms.
14. Appendices—
    a—Report of the Alberta Horse Breeders' Association.
    b—Report of the Alberta Cattle Breeders' Association.
    c—Report of the Alberta Swine Breeders' Association.
    d—Report of the Alberta Sheep Breeders' Association.

I have the honour to be, Sir,

Your obedient servant,

GEORGE HARCOURT,
Deputy Minister of Agriculture.

1.—REPORT OF THE DEPUTY MINISTER.

SIR,—The work of the Department lends itself to divisions more or less self-contained, and for this reason it has been broken up into branches, the heads of which make a report on the work covered by their particular branch. Such work as has not been placed under a branch is grouped under the following headings for the purposes of this report:

1. Live Stock.
2. Crops.
3. Vital Statistics.
4. Miscellaneous.

1.—LIVE STOCK.

Stock came through the winter in excellent shape on account of the mild winter and general abundance of feed. Further details regarding stock generally will be found in the report of the Live Stock Commissioner.

ENROLMENT OF STALLIONS.

The provisions of The Horse Breeders' Ordinance require the owner of every stallion, who stands his horse for profit or gain, to have him enrolled in the books of the Department. Under the authority vested in him by the Ordinance the Minister of Agriculture has decided that only those stallions recorded in the stud book kept under the authority of, or those foreign stud books approved and recognized by, the Canadian National Live Stock Records of Ottawa, shall be eligible for enrolment as purebred stallions.

These Canadian stud books are as follows:

Clydesdale Stud Book of Canada.
Canadian Hackney Stud Book.
Canadian Shire Horse Stud Book.
Canadian Percheron Stud Book.
Canadian Thoroughbred Stud Book.
Canadian Belgian Draft Stud Book.
French Canadian Horse Breeders' Stud Book.
Canadian Pony Stud Book.
Canadian French Coach Stud Book.
Canadian Suffolk Horse Stud Book.
Canadian Standard Bred Stud Book.

The following foreign stud books are recognized by the Canadian National Live Stock Records and stallions possessing registration in these records will be entitled to enrolment in the books of the Department as purebred:

Cleveland Bay Stud Book.
Yorkshire Coach Stud Book.
American Morgan Register.
American Saddle Horse Register.
Ostfriesisches Stutbuch.
Stutbuch der Munsterlandisch-Oldenburgischen Geest.
Oldenburger Stutbuch.
Gestutbuch der Holsteinischen Marschen.

Grade certificates are issued for horses which are not of pure breeding, and those horses recorded in unrecognized stud books.

The enrolment of stallions for the year 1912 shows a slight decrease over that of the previous year. The following is a summary:

Clydesdales	106
Belgians	10
French Coach	2
German Coach	0
Hackney	6
Percheron	76
Shire	6
Suffolk Punch	12
Standard Bred	11
Thoroughbred	3
French Canadian	1
Total enrolment of Pure Breds	234
Total enrolment of Grades	223
Grand Total	457

TOTAL ENROLMENT OF STALLIONS IN PROVINCE.

BREED	YEAR								
	1904	1905	1906	1907	1908	1909	1910	1911	1912
Clydesdale	68	25	81	86	95	101	125	140	106
Percheron	16	10	35	56	52	54	65	72	76
Standard Bred	8	2	10	15	15	20	14	17	11
Shire	10	4	10	18	11	11	12	6	6
Hackney	5	1	2	8	8	10	5	5	6
French Draft	2	4	5	2	8	4	0	0	0
Thoroughbred	3	1	10	8	6	5	10	4	3
Suffolk	3	0	3	4	6	4	4	9	12
Belgian	1	0	2	9	5	3	10	15	10
French Coach	2	2	2	0	4	3	2	0	2
German Coach	0	0	0	2	2	0	0	4	0
American Saddle H'rs	0	0	0	0	1	0	1	0	0
Cleveland Bay	0	0	1	0	0	0	0	0	0
French Canadian	0	0	1	0	0	0	0	1	1
Hunter	0	0	0	0	0	0	1	0	1
Total Pure Breds	118	49	162	208	213	216	249	273	234
Total Grades	151	98	329	334	269	231	225	201	223
Total Enrolment	269	147	491	542	482	447	474	474	457

Total enrolment in nine years, Pure Bred	1,722
Total enrolment in nine years, Grade	2,061
Total	3,783

ANIMALS RUNNING AT LARGE.

Under this heading is grouped a report on the workings of four Ordinances, namely: The Stray Animals Ordinance, dealing with the disposal of animals found on the premises of parties other than their owner; The Entire Animals Ordinance, providing for the safety of breeding stock on the open range by prohibiting the running at large of stallions over one year, and bulls over nine months old; The Herd Ordinance (applicable only in a limited area), providing for the fencing in of all stock during the crop season, thus reducing the amount of fencing required; and The Pound District Ordinance, under the provisions of which farmers in well settled districts can regulate the running at large of all animals by impounding those not under proper control and assessing damages where they break through a lawful fence.

THE STRAY ANIMALS ORDINANCE.

During the year brand readers were appointed wherever it was found necessary to have them. Generally speaking the work of these men has proven very satisfactory.

The following brand readers have been appointed:

NAME	ADDRESS
Elias Pilling	Leavitt
Frank V. Falconer	Cardston
R. A. Pilling	Cardston
James S. Parker	Mountain View
R. C. McDonald	Macleod
N. Neilson	Taber
D. F. W. Willock	Pincher Creek
Lawrence Doyle	Carmangay
John Wright	Monarch
Wm. R. Cochrane	Granum
Alfred E. Hunter	Claresholm
Henry Frey	Barons
T. Boulton	Willows
Thomas H. Dengan	Nanton
George Todd	Thigh Hills
Peter McElroy	Nanton
Levi Ayotte	Champion
W. B. Thorne	Aldersyde
E. Jewitt Thorne	Aldersyde
Arthur R. Bond	Loma
Noah Wakeford	Gladys
George Scott	Okotoks
A. S. McDonald	Cochrane
James Robertson	Crossfield
H. G. Newcomb	Simons Valley
S. Savage	Delia, Alta., via Gleichen
Thomas E. McSpadden	Sunnyslope
Percy W. Rubbra	Carstairs
David J. Witwer	Acme
A. J. Cameron	Ghost Pine Creek
W. K. Evans	Ponoka
E. R. Levagood	Didsbury
Hugh Ross	Harmattan
C. O. Lindeborg	Drumheller
L. E. Eckenfelder	Trochu
Henry A. Ross	Trochu
Cornell L. Holmes	Olds

W. Niddrie	Mound
John A. Swanson	Trochu
E. G. Chenfield	Bowden
J. H. McArthur	Knee Hill Valley
Thomas Moore	Trochu
C. O. Herron	Mayton
Alfred E. Benedict	Mayton
Luskey Berkley	Murray Valley
Fred J. Niddrie	Mound
John Turnbull	Bowden
Thomas Baird	Red Willow
E. M. Whiteside	Zenith
J. H. Thompson	Scollard
W. B. Dunlop	Victor
Frank Johnstone	Erskine
J. Brady	Mannville
R. J. Ferguson	Halkirk
P. D. Cooney	Stettler
Ernest A. Robinson	Lawsonburg
Henry Brace	Britain
Oliver Gobbon	Erskine
W. H. Taylor	Halkirk
Fred Mason	Hand Hills
John J. Miller	Hand Hills
Bert Uttler	Gopher Head
Walter Sharpe	Sedgewick
Charles B. Brownfield	Brownfield
O. A. Hastings	Hastings Coulee
H. N. Lockwood	Provost
C. H. Schneider	Flagstaff
John F. Harris	Flagstaff
T. J. Coppock	Ingleton
Ed. G. Symington	Provost
J. R. Adams	Lougheed
Edward F. Dahl	Czar
C. A. Hogan	Galahad
J. S. Reynolds	Cereal
Oscar Carlston	Lake Thelma
Thomas Helmbolt	Coronation
Fred H. Davis	Wheat Belt
A. F. Maley	Hanna
Nels P. Nystrom	Amisk
A. J. Thompson	Consort
W. A. Reid	Consort
Mike Riedel	Castor
L. K. Cranmer	Cranmer
J. H. Caldwell	Killam
R. Davidson	Raven
F. H. Thomson	Innisfail
Walter Whiteside	Penhold
Robert Milligan	Pine Lake
Thomas Sigurdson	Burnt Lake
C. W. Wyndham	Perbeck
Spencer Wyndham	Penhold
Thomas B. Duncan	Innisfail
G. H. Bawtinheimer	Red Deer
Donald Smith	Red Deer
Percy Kneeshaw	Delbourne
Archie Neil McKinnon	Leslieville
Clarency N. Guynup	Red Deer
A. J. Leslie	Lacombe
Marshall Douglas	Lacombe
R. T. Attwood	Blackfalds
E. B. Proctor	Clive
Horace Hickling	Haunted Lake, via Alix
George A. Wells	Whitebrush
Clarence Dameron	Bentley
O. M. Gilbertson	Gilby

Thomas J. Ross	Clive
James Tees	Valley City
W. D. Cook	Mirror
James J. Cairns	Mirror
P. R. Stewart	Earlville
Saul Preston	Buckhorn
J. W. Donovan	Bluff Centre
James Everts	Wittenburg
C. R. Kirk	Bismark
Charles Tate	Waterglen
C. L. Farnum	Ponoka
N. A. Donaldson	Manfred
Sam Doran	Ponoka
R. Ravnsborg	Asker
J. D. Cowan	Wetaskiwin
S. H. Johnson	Beaumont
J. A. Sangster	Conjuring Creek
John W. West	Millet
H. F. Flater	Leduc
H. G. Puthouse	New Sarepta
John A. Burke	Ferry Point
P. Hubbell	Meeting Creek
L. N. Bull	Hastings Coulee
G. T. Campbell	Wanda
Andrew Leslie	Duhamel
R. V. Campbell	Daysland
C. I. Bijorge	Ferry Point
C. Nixon	Manfred
H. Kibbe	Meeting Creek
D. A. Hart	Ohaton
James B. Erickson	Camrose
Wm. M. Ross	Round Hill
George Bourque	Earling
George Blakely	New Sarepta
Henry Eshpeter	Spring Lake
A. A. Loftus	Innisfree
Blair McGregor	Wildmere
James T. Brady	Mannville
F. A. Boileau	Duvernay
J. S. McCallum	Mundare
P. P. Kjosness	Ryley
P. Bolan	Whitford
A. Watson	Chipman
S. A. Richardson	Bens Lake
H. J. Frederick	Bruce
D. J. McCallum	Mundare
J. S. McWithey	Strathcona
A. C. Smith	Wabamun
Fred Cosens	Sion
John A. Edgson	Edison
Thomas Littlefair	Mosside
J. E. Gibeault	Morinville
Thomas A. Wilson	Sturgeonville
George Mulligan	Bon Accord
Walter Dinwoodie	Wahstao
Leonard Girard	Brosseau

Following is a statement showing the number of animals sold, when, by what justice, amount received, and amount forwarded to the Department. The money received is placed in a trust fund and may be obtained by the owner upon his proving to the satisfaction of the Department that he is the rightful owner, within twelve months from the date of sale.

SALES OF ESTRAY ANIMALS UNDER THE STRAY ANIMALS ORDINANCE FROM JANUARY 1st TO DECEMBER 31st, 1912

Justice	Address	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Proc'ds of Sale	Sent to Department
Arnup, A. W.	Entwistle	Gelding, roan, short tail, feet black to knee, about six years old, branded lazy split key on left shoulder	Apr. 15, 1911	Apr. 30, 1911	May 30, 1912	$41.50	$21.55
,, ,,	,,	Oxen, one team, one white and black with one horn broken, one red and white, point of horn sawn off, weight about 1,600 pounds each, no visible brands	Oct. 15, 1912	Nov. 15, 1912	Dec. 28, 1912	153.00	125.90
Biddell, P. J.	Cowley	Heifer with bull calf, three years old, branded what looks a little like inverted open box sitting on top of open box followed by C left vertical half diamond small slanting bar under, on left ribs, there seems to be a Y put on since over the C.	June 1, 1912	July, 15, 1912	Sept. 11, 1912	67.00	50.75
Brown, R. E.	Kitscoty,	Gelding, black, branded mule shoe on right hip	Sept. 15, 1911	Nov. 15, 1911	Feb. 6, 1912	43.00	28.65
Barber, F. H.	Vermilion	Heifer, yearling, has horns, red with white underline, white along back from tail to point of shoulder, no brand	Nov. 1911	Jan. 31, 1912	Apr. 12, 1912	40.00	22.75
Barber, F. H.	,,	Steer, roan, branded U bar K on right rib, four years old	Dec. 27, 1911	Feb. 15, 1912	Apr. 30, 1912	57.00	39.00
Brower, I. B.	Harmattan	Steer, red and white, three years old, white spots on sides and white belly, ears have been punched, broken horns, no visible brand	May, 1, 1912	May 15, 1912	July 25, 1912	40.50	25.00
Bottomley, R. E.	Gadsby,	Cow, red with white spots on hips and belly, white spot in forehead, tail nearly all white, branded inverted Y followed by 4, upper half diamond over, on right hip, brand badly blotched	Feb. 9, 1910	Dec. 31, 1911	Mar. 14, 1912	36.50	21.35
Blair, James,	Granum	Gelding, buckskin, branded O X, on right shoulder, the X very dim	Jan. 9, 1911	Apr. 15, 1911	Nov. 9, 1912	46.50	29.10
Campbell, Fred.	Ferry Point	Steer, yearling all red, branded H 4, bar under, on left hip	Nov. 25, 1911	Mar. 15, 1912	July 13, 1912	22.50	7.60
Campbell, R. B.	Olds	Steer, red and some white, branded inverted P4 lower half quarter circle over on left hip	Nov. 1, 1910	Dec. 15, 1910	Jan. 20, 1912	22.50	3.85
,, ,,	,,	Heifer, red and white, branded L K bar over and under, on right hip	May 20, 1911	Dec. 15, 1911	Feb. 24, 1912	25.00	8.00
,, ,,	,,	Steer, two years old, branded B T upper quarter circle over on left hip	Jan. 1, 1912	Feb. 12, 1912	May 15, 1912	16.00	1.00
,, ,,	,,	Mare, nine years old, weight 1000 lbs., roan, star in face, branded a figure that looks like a double round topped T on left shoulder, also branded D P with lazy P, followed by a bar with lazy V connected at bottom, on right shoulder	Jan. 15, 1912	Feb. 15, 1912	July 5, 1912	118.50	100.40

SALES OF ESTRAY ANIMALS UNDER THE STRAY ANIMALS ORDINANCE FROM JANUARY 1st TO DECEMBER 31st, 1912—(Continued)

Justice	Address	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Proc'ds of Sale	Sent to Department
Carruthers, P.	Grassy Lake	Ox, light red, with little spot on forehead, white strip along top of his back, white belly, underbit on left ear, weight about 1400 pounds, well broken, dehorned, indistinct brand on left shoulder	Dec. 2, 1911	Dec. 15, 1911	Mar. 2, 1912	$53.00	$44.33
Corneille, C. G.	Camrose	Steer, red with white spots, hind legs white, white under belly, piece cut out of side of right ear, left ear cut or frozen off, about 18 months old, no visible brand	May 31, 1911	Jan. 31, 1912	Apr. 17, 1912	18.00	2.25
" "	"	Steer, black with white under belly, white spot on right shoulder, some white on left flank, white spot on each hind foot, mulley, no visible brand	Aug. 31, 1911	Jan. 31, 1912	Apr. 9, 1912	15.50	.....
" "	"	Mare, bay, weight about 900 pounds, age about 12 years, branded script capital M, on left shoulder, left vertical quarter circle, and what looks like a lazy short handled two-tined fork on left thigh, 17 on right hip, lazy B on right thigh and lazy P with lazy S over on right shoulder	Dec. 1, 1911	Mar. 15, 1912	June 8, 1912	75.00	58.35
" "	"	Gelding, buckskin, black mane and tail, age about 12 years, weight about 800 pounds, no visible brand	Apr. 30, 1912	Aug. 15, 1912	Oct. 23, 1912	15.00	9.35
Carruthers, N. E.	Lacombe	Mare, bay, twelve years old, about 1200 pounds, branded S on right shoulder	Dec. 3, 1911	Dec. 30, 1911	Feb. 24, 1912	55.00	33.90
Charley, W. R.	Pine Lake	Heifer, red, coming four years old, spot on both flanks, tip of tail white, white underline, branded J T lower quarter circle over, on left ribs	Dec. 1911	Feb. 29, 1912	May 25, 1912	21.00	5.88
" "	"	Gelding, bay, about seven years old, branded U reclining to the left followed by B connected at bottom, on left jaw, and 2 V, on right jaw	Nov 1911	Feb. 29, 1912	May 25, 1912	75.00	66.28
Church, E.	Youngstown	Gelding, grey, six years old, branded 9 A monogram, on left shoulder	May 15, 1911	Nov. 15, 1911	Feb. 1, 1912	60.00	52.85
Campbell, W.	Holden	Gelding, sorrel, white star on forehead, both hind feet white, weight about 1000 pounds, branded O with upper quarter circle over, and lazy M over it with F connected at the top of the lazy M, on left shoulder, and lazy M with F connected at top on left thigh	Jan. 1912	Feb. 15, 1912	Apr. 12, 1912	25.00	5.68
Cressman, M.	Stavely	Mare, black, five years old, branded U J monogram lower half diamond under, on left shoulder	Apr. 30, 1912	Aug. 15, 1912	Dec. 1, 1912	160 00	143.16
" "	"	Gelding, sorrel, coming five years old, branded either the figure 2 or an anchor on left shoulder, white star, hind feet white	Apr 15, 1911	Sept. 30, 1911	Mar. 3, 1912	155.00	135.78

Creighton, A. J.	Culham	Steer, roan three years old, left ear off, no brand visible	Dec. 2, 1911	Dec. 30, 1911	Feb. 22, 1912	45.00	27.60
Davidson, D.	Daysland	Cow with calf, branded J R, on left shoulder, small red calf at side	Dec. 1, 1911	Dec. 15, 1911	Mar. 1, 1912	27.50	3.25
"	"	Steer, red, yearling, stub horns, branded T with Y reversed J monogram connected at bottom quarter circle over, on left hip	Dec. 10, 1911	Jan. 31, 1912	Apr. 1, 1912	20.00	3.88
"	"	Heifer, red, yearling, white spot on right shoulder, a little white on belly, branded J R upper quarter circle over, on left shoulder	Dec. 10, 1911	Jan. 31, 1912	Apr. 1, 1912	30.00	13.63
"	"	Heifer, roan, two years old, no visible brand	Dec, 10, 1911	Jan, 31, 1912	Apr. 1, 1912	16.50	.17
"	"	Heifer, red, yearling, star and strip in face, white strip on shoulder and down left hip, no brand	Nov. 1, 1911	Dec, 30, 1911	Apr. 5, 1912	18.50	2.09
Davie, John S.	Crossfield	Pony mare, roan, weight 750 pounds, black mane and tail, branded heart pointing down with 1 inside, on left shoulder and J with lazy D under on right shoulder	Dec. 1910	Oct. 31, 1911	Jan. 9, 1912	41.00	30.58
Davies, Chas. A.	Perbeck	Heifer, red, two years old, end of right ear cut off and split, branded upper half diamond with two unreadable characters below on right side	Nov. 1911	Dec. 15, 1911	May 7, 1912	15.65	......
Dought, L. M.	Content	Gelding, brown, four years old, weight 850 pounds, no brand	Nov. 1, 1911	Dec. 31, 1911	Mar, 6, 1912	60.00	41.95
Duffus, A.	Calgary	Pig, black barrow, no marks	Nov. 11, 1911	Nov. 30, 1911	Feb. 5, 1912	20.00	6.70
Disher, Geo. H.	Chipman	Calf, red and white, no brand, (bull)	Oct. 23, 1911	Dec. 31, 1911	Feb. 9, 1912	20.00	....
Edgeworth, A.	Foreman	Steer, black, little white under flank and brisket, three years old, branded either H. F., bar over or monogram J H F., bar over, on left shoulder and shepard's crook T, on right flank	Jan. 1, 1912	Mar. 31, 1912	June 22, 1912	57.00	37.53
Fleming, A. W.	Ohaton	Steer, brindle, mulley, coming two years old, small for age, indistinct brand on left ribs	Nov. 1, 1911	Dec. 15, 1911	Feb. 3, 1912	15.50	.88
Fetherston, F. W.	Nanton	Gelding, black, aged, no visible brand	Mar. 1912	Apr. 30, 1912	May 31, 1912	100.00	93.00
Farr, Leslie	Airdrie	Mare, pony, buckskin, weight 850 pounds, no visible brand	Aug. 31, 1911	Dec. 31, 1911	Feb. 29, 1912	31.00	22.75
Graham, J. H.	Brownfield	Gelding, bay, three white feet, and white face, about nine years old, weight about 700 pounds, branded N bar under and upper quarter circle over, on left shoulder, also script F followed by C or it might be an imperfect O. on right flank	Dec. 23, 1911	Jan. 15, 1912	Mar. 2, 1912	20.50	5.89
Garnham, S. H.	Elk Point	Steer, light roan, medium long straight horns, about two years old, no visible brand	Nov. 1911	Feb. 29, 1912	June 22, 1912	37.00	24.20
Green, Albert	Halfway Lake	Heifer, red with lean back, no visible brand	Dec 1911	Feb. 29, 1912	May 7, 1912	17.00	5.33
" "	" "	Cow, red and white, horns turned in, no visible brand	Dec. 1911	Feb. 29, 1912	May 7, 1912	27.00	14.13
" "	" "	Heifer, dark red, horns almost straight up, no visible brand	Dec. 1911	Feb. 29, 1912	May 7, 1912	11.00	....
" "	" "	Heifer, light roan, no visible brand	Dec. 1911	Feb. 29, 1912	May 7, 1912	16.00	4.30
Hunter, W. E.	Strome	Steer, red, no visible brand	Nov. 15, 1911	Nov. 30, 1911	Feb. 16, 1912	15.00	2.00

SALES OF ESTRAY ANIMALS UNDER THE STRAY ANIMALS ORDINANCE FROM JANUARY 1st TO DECEMBER 31st, 1912—(Continued)

Justice	Address	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Proc'ds of Sale	Sent to Department
Hunter, W. E.	Strome	Heifer, blue roan, branded inverted Y followed by H, bar over, on right shoulder	Nov. 1, 1911	Jan. 31, 1912	May 13, 1912	$13.00	$.....
Heath, B.M.	Bruce	Heifer, red and white spotted, one year old, no brand visible	Apr. 1, 1911	Feb. 15, 1912	Apr 8, 1912	18.50	2.00
” ”	”	Gelding, about six years old, strip in face, hind feet white, branded 8, on left flank	Nov. 1, 1911	Dec. 15, 1911	Feb. 10, 1912	91.00	71.75
Huston, W.C.	Wiste	Gelding, strawberry roan, white stripe in face, four white legs to knees, black mane and tail, branded a circle with a small circle over on left shoulder	Aug. 1, 1911	Mar. 31, 1912	June 24, 1912	126.00	109.25
Graham, J. H.	Brownfield	Heifer, red, white face, legs white up to body, no brands visible	Feb. 21, 1912	Mar. 15, 1912	May 28, 1912	35.00	20.65
” ”	”	Steer, blue and white mulley, branded what looks like upper half diamond followed by an anchor, lower quarter circle, on right hip	Nov 1, 1911	Apr. 15, 1912	July 5, 1912	40.00	25.00
” ”	”	Heifer, red and white, rising two years, no brands.	Nov. 1, 1911	Apr. 15, 1912	July 5, 1912	23.00	8.23
Grey, W. B.	Stettler	Heifer, brindle white, white under and on each side of jaws, a W of white hairs in forehead, short horns, two years old, no visible brand	Dec. 15, 1911	Jan. 31, 1912	Apr. 3, 1912	21.00	3.95
” ”	”	Ox, mulley, red, rising five years old, nose torn out of lip, ear slit, short tail, work ox, no brand	Dec. 15, 1911	Mar. 15. 1912	June 22, 1912	71.00	53.33
” ”	”	Heifer, red, three years old, branded X O, on right hip	Oct. 1, 1911	Feb. 15, 1912	Aug. 3, 1912	35.00	16.58
Graham, W.M.	Lake View	Heifer, red and white, no brand visible	Nov. 25, 1911	Feb. 29, 1912	May 1, 1912	21.00	5.23
” ”	” ”	Heifer, black and white, yearling, no brand visible.	Jan. 20, 1912	Feb. 15, 1912	May 8, 1912	16.50	1.05
” ”	” ”	Cow, red, white belly, coming three years old, branded A followed by T with a small 3 connected at the end of the top of the T, on right ribs, brand is badly blotched	Jan. 20, 1912	Feb. 15, 1912	May 8, 1912	26.50	10.80
Hogg, G. R.	Huxley	Heifer, rising three years old, red and white spots, one horn broken, no brand	Dec. 15, 1911	Feb. 15, 1912	Apr. 8, 1912	25.00	12.15
” ”	”	Heifer, light roan, three years old, branded inverted rowlock followed by H followed by a horizontal bar, on left ribs	Jan. 5, 1912	Feb. 15, 1912	May 2, 1912	16.50	1.50
Hussey, E. S.	Evarts	Mare, bay, about 1000 pounds, branded A lazy S, over, on left shoulder	July 1911	Dec. 31, 1911	Sept. 21, 1912	77.00	
” ”	”	Mare, bay, about 800 lbs., branded A lazy S over, on left shoulder	July 1911	Dec. 31, 1911	Sept. 21, 1912	40.00	28.80
Hallman, J.	Acadia Valley	Mare, bay, two white feet, white stripe in face, branded a figure that looks like a diamond on left hip	June 1, 1911	Feb. 15, 1912	Nov. 13, 1912	105.00	89.75

James, C. W.	Claresholm	Gelding, sorrel chestnut, white strip on face, flax mane and tail, right hind foot white to knee, white spot on withers, about nine years old, no brand	June 8, 1912	June 30, 1912	Oct. 31, 1912	42.00	31.75
Jones, C. R.	Wheat Belt	Cow and calf, red and white, branded J. G., on right neck, advertised as blotched, one front foot frozen off, red and white heifer calf at foot	Nov. 8, 1911	Dec. 31, 1911	Mar. 2, 1912	22.00	3.45
” ”	” ”	Cow, large red, branded M U — on left ribs	Nov. 8, 1911	Dec. 30, 1911	Mar. 2, 1912	47.00	32.15
Kembry, R. A.	Westerdale	Cow, red, seven or eight years old, tip broken off left horn, branded lazy double rowlock, on left side	Dec. 1, 1911	Feb. 15, 1912	Apr. 23, 1912	35.00	20.00
” ”	”	Heifer, mulley, two years old, red roan, branded lazy double rowlock on left side	Dec. 1, 1911	Feb. 15, 1912	Apr. 23, 1912	22.50	7.80
” ”	”	Steer, red, two years old, white on face, few spots on each hip, branded 5 followed by double rowlock, bar over, on right ribs, also 9 U followed by a figure that looks like H or K, on left ribs.	Dec. 1, 1911	Feb. 15, 1912	Apr. 23, 1912	22.50	7.80
” ”	”	Heifer, red and white, indistinct brand on right ribs, looks like O with vertical bar connected at top, followed by F bar under.	Dec. 1, 1911	Mar. 15, 1912	June 27, 1912	18.00	3.80
” ”	”	Steer, yearling, red, branded an indistinct brand on left shoulder, looks like a vertical key followed by a pound sign	Nov. 1, 1911	Feb. 15, 1912	June 27, 1912	20.00	3.50
Kennedy, Thomas	Ulster	Steer, red, two years old, white in face, has horns, two white spots on each side of shoulder, white on both flanks and under belly, branded Y, bar over, on left shoulder, might be a wire cut mark.	Nov. 1, 1911	Nov. 15, 1911	Feb. 14, 1912	30.00	14.15
” ”	”	Heifer, red, cross breed, shorthorn two years old, white star on forehead and white under breast, no brand	Aug. 1, 1911	Dec. 14, 1911	Mar. 5, 1912	32.00	15.50
” ”	”	Heifer, yearling, red, in poor condition, small in size, apparently under one year, no brand	Dec. 1, 1911	Feb. 28, 1912	Apr. 15, 1912	12.00	....
” ”	”	Hog, Yorkshire, about 150 pounds, no marks visible.	June 5, 1911	June 30, 1912	Oct. 29, 1912	9.00	......
Kuhnke, F.	Ferintosh.	Mare, buckskin, star in forehead, dark mane and tail, three white feet, some white on fourth foot, about six years old, weight 800 or 900 lbs., branded circle on right shoulder	Dec. 1911	Feb. 15, 1912	Apr. 13, 1912	64.00	45.50
Krafting, H. E.	Asker	Steer, two years old, red, white under belly, no brand	Oct. 15, 1911	Dec. 15, 1911	Feb. 28, 1912	18.00	2.70
” ”	”	Steer, roan, one year old, no brand	Oct. 15. 1911	Dec. 15. 1911	Feb. 28, 1912	16.00	1.00
” ”	”	Mare, black, indistinct brand	Dec. 1, 1911	Dec. 31, 1911	Mar. 8 , 1912	17.00	1.67
” ”	”	Mare, sorrel, white stripe in forehead, branded P 9 on left hip	Jan. 1, 1912	Feb. 15, 1912	Apr. 15. 1912	14.00	....
Laidlaw, J. K.	Lochend	Steer, three years old, red with white spots on forehead, little white on left thigh, white under brisket, branded P T I, on left ribs, and also lazy Y with a vertical half circle down through it	Jan. 20, 1912	Feb. 15, 1912	Apr. 27, 1912	32.50	18.50

SALES OF ESTRAY ANIMALS UNDER THE STRAY ANIMALS ORDINANCE FROM JANUARY 1st TO DECEMBER 31st, 1912—(Continued)

Justice	Address	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Proc'ds of Sale	Sent to Department
Lindley, T. P.	Stoney Plain	Mare, about 1000 lbs., four white feet, white stripe running over nose, unreadable brand on right shoulder	Nov 1911	Dec. 30, 1912	Mar. 2, 1912	$90.00	$76.35
Layton, S. J.	Taber	Mare, grade, bay, one year old, bald face, two white hind legs nearly up to hocks, no brand visible, wire cut on left hind leg, no brand visible	Sept. 28, 1910	May 31, 1911	Mar. 13, 1912	88.00	81.73
” ”	”	Colt, grade, brown, one year old past, weight 600 to 700 lbs., no visible brand	May 2, 1912	Sept. 14, 1912	Oct. 14, 1912	40.50	28.00
” ”	”	Gelding, black, branded a small diamond, bar under, on right hind leg	Nov. 1, 1911	Aug. 15, 1912	Oct. 23, 1912	26.00	20.41
” ”	”	Gelding, bay, grade, branded 73, small circle under 3, on right shoulder	Nov. 1, 1911	Aug. 15, 1912	Oct. 23, 1912	121.00	114.01
” ”	”	Gelding, gray, grade, branded C on right shoulder, triangle on left jaw	Nov. 1, 1911	Aug. 15, 1912	Oct. 23, 1912	85.00	77.91
” ”	”	Mare, black, grade, branded 144 lazy B, over right shoulder	Nov. 1, 1911	Aug. 15, 1912	Oct. 23, 1912	76.00	69.13
” ”	”	Mare, brown, grade, branded reversed N with small circle under, on left shoulder	Nov. 1, 1911	Aug. 15, 1912	Oct. 23, 1912	107.00	99.50
” ”	”	Filly, black, grade, yearling past, no brand	Nov. 1, 1911	Aug. 15, 1912	Oct. 23, 1912	67.00	60.69
” ”	”	Filly, yearling past, no brand	Nov. 1, 1911	Aug. 15, 1912	Oct. 23, 1912	60.00	53.53
Lowe, Geo.	Amisk	Mare, sorrel, with colt, weight about 1200 pounds, branded F with lazy B under, on left shoulder.	Oct. 1910	Sept. 15, 1911	Mar. 23, 1912	115.00	97.40
Ludtke, E. C.	Bow Island	Mare and colt, buckskin pony mare, four years old, white stripe in face, both hind ankles white, weight 850 pounds, branded plus sign on left shoulder	Aug. 22, 1911	Aug. 31, 1911	Feb. 23, 1912	50.00	43.35
” ”	” ”	Horse, roan, white face, four white legs, about two years old, branded R R, on left shoulder	Nov. 1, 1911	Mar. 30, 1912	June 26, 1912	33.00	22.73
” ”	” ”	Gelding, bay, about 900 pounds, branded incomplete circle over two vertical bars, the bars slope towards each other at the top, on right shoulder.	July 1911	Oct. 15, 1911	June 6, 1912	100.00	79.65
Long, F. J.	Gadsby	Gelding, buckskin, black legs, two white hind feet, white face, no brand or distinctive mark visible, weight about 800 pounds, age about 6 years	Oct. 8, 1912	Oct. 31, 1912	Jan. 9, 1912	50.00	16.65
Mason, Wm.	Bon Accord	Cow, red, about three years old, some white behind right shoulder, dehorned, no brand visible.	Nov. 26, 1911	Dec. 15, 1911	Feb. 3, 1912	27.00	14.24
” ”	” ”	Gelding, dark bay, work horse, has one white left hind foot, small white stripe on face, some white on both forefeet, ten years old, weight about 1200 pounds, no visible brand	Aug. 27, 1912	Sept. 15, 1912	Dec. 18, 1912	46.00	36.70
Milligan, R.	Pine Lake	Steer, red and white, six years old, branded reversed S, on right hip	July 15, 1912	Nov. 30, 1912	Dec. 30, 1912	55.00	36.50

Matthias, E. H.	Castor	Gelding, bay, about twelve years old, about 1350 pounds, branded a triangle followed by 2, on right thigh	Nov. 5, 1911	Dec. 31, 1911	Feb. 3, 1912	132.50	110.55
,, ,,	,,	Gelding, brown, about nine years old, about 1300 pounds, indistinct brand on shoulder	Nov. 5, 1911	Dec. 31, 1911	Feb. 3, 1912	170.00	146.85
,, ,,	,,	Gelding, grey, about 1100 pounds, eight years old, branded T X on left jaw, and lazy S, on right shoulder	May 1, 1911	Dec. 30, 1911	Feb. 26, 1912	115.00	94.60
,, ,,	,,	Gelding, grey, about 1100 pounds, nine years old, branded T X, on left jaw, and R, on left thigh.	May 1, 1911	Dec. 30, 1911	Feb. 26, 1912	115.00	94.60
,, ,,	,,	Mare, roan, white face, white stockings, weight 1100 pounds, branded E F, on right thigh	Nov. 1, 1911	Jan. 15, 1912	Mar. 29, 1912	150.00	118.50
,, ,,	,,	Colt, dark bay, grade, two hind feet white, weight about 900 pounds, no visible brands	Jan. 31, 1912	Feb. 15, 1912	Apr. 12, 1912	80.00	61.70
,, ,,	,,	Mare, light buckskin, about four years old, white mane and tail, blaze on forehead, branded arrow-head point up, had very short stem on left jaw	Apr. 1, 1912	Aug. 15, 1912	Nov. 12, 1912	75.00	65.25
,, ,,	,,	Mare, cayuse, dark grey, two years old, weight 850 pounds, wire cut on left shoulder, no visible brand	June 2, 1912	Sept. 15, 1912	Nov. 14, 1912	61.50	49.60
Mennie, Robt. H.	Andrew	Gelding, red, small white star on forehead, short cut tail, six or seven years old, about 900 pounds, no brand visible	Oct. 15, 1911	Nov 15, 1911	Jan. 18, 1912	25.00	11.68
,, ,,	,,	Mare, bay, white face, right front and left hind foot white, weight about 850 pounds, branded R on left shoulder	May 1, 1911	Aug. 15, 1911	Mar. 22, 1912	78.00	67.50
,, ,,	,,	Heifer, red, white spots on belly, white spot in forehead, about two years old, no brand visible	Oct. 1911	Feb. 15, 1912	Apr. 23, 1912	14.50	8.10
Mills, Henry D.	Wetaskiwin	Gelding, sorrel, about twelve years old, wire cut on left hind leg, branded F, on right shoulder	July 1912	Nov. 15, 1912	Dec. 29, 1912	40.00	25.80
Morton, C. B.	Erskine	Steer, one year old, red, branded J followed by a reversed E, lower quarter circle over, on right ribs	Dec. 20, 1911	Jan. 15, 1912	Mar. 23, 1912	20.00	1.95
,, ,,	,,	Steer, red, three years old, Hereford, markings, white on head and belly, branded lazy square bottomed U followed by S, bar under, on right ribs	Nov. 9, 1911	Dec. 31, 1911	Mar. 26, 1912	35.00	18.31
,, ,,	,,	Steer, roan, two years old, branded inverted Y followed by 7 lower quarter circle over, on left ribs, two notches in right ear, one notch in left ear	Dec. 1, 1911	Jan. 15, 1912	Apr. 9, 1912	33.00	16.56
,, ,,	,	Heifer, red, white faced, three years old, branded a blotched brand on right ribs, it looks like a 9 followed by a blotched 1 bar over	Nov. 30, 1911	Dec. 15, 1911	Mar. 30, 1912	37.00	20.46
Morrow, E. H.	Crossfield	Gelding, muddy gray, weight 800 pounds, no brand	Jan. 1, 1912	Mar. 15, 1912	July 16, 1912	76.75	71.35
Moore, D. H.	Islay	Gelding, brown, white star on forehead, no visible brand	May 1, 1912	May 31, 1912	Nov. 1, 1912	85.00	79.00
Markeberg, D. J.	Markerville	Heifer, roan, with red neck and head, star in forehead, about two years old, very indistinct brand on right hip, might be a reversed L followed by two bars, one above the other slanting to the right	Dec. 15, 1911	Jan. 15, 1912	Mar. 20, 1912	21.00	4.83

SALES OF ESTRAY ANIMALS UNDER THE STRAY ANIMALS ORDINANCE FROM JANUARY 1st TO DECEMBER 31st, 1912—(Continued)

Justice	Address	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Proc'ds of Sale	Sent to Department
Markeberg, D. J.	Markerville	Gelding, black, right hind hoof white, wire cut on same leg, weight about 1000 pounds, branded horse-shoe pointing down on left thigh	Dec. 15, 1911	Jan. 15, 1912	Feb. 24, 1912	$36.00	$20.55
" "	"	Mare, bay, both hind feet and right front foot white, star in forehead, weight about 900 pounds, branded horseshoe pointing down, on left thigh	Dec. 15, 1911	Jan. 15, 1912	Feb. 24, 1912	59.00	42.97
McLean, D. B.	Mannville	Calf, roan, no visible brand	Nov. 22, 1911	Feb. 15, 1912	May 15, 1912	9.25	.....
McIntyre, N.	Vegreville	Calf, steer, yellow with white spots, about ten months old, no visible brand	Oct. 4, 1911	Jan. 15, 1912	Mar. 21, 1912	8.50	.....
McCue, R.	Bowden	Steer, red, three years old, spot in forehead, dehorned, white between forelegs and on belly, branded 12 or Y 2 with small inverted V over, on right ribs. The brand is indistinct	Nov. 1, 1911	Mar. 15, 1912	May 28, 1912	30.00	14.70
McDonald, J. S.	Sedgewick	Mare, chestnut, twelve years old, four white feet, white stripe in face, weight about 900 pounds, branded lazy W D monogram, on left shoulder, horizontal bar with vertical bar connected at each end underneath with P over, on left thigh.	Oct. 13, 1911	Feb. 15, 1912	Apr. 23, 1912	30.00	13.38
McIlmoyle, Z.	Sunnyslope	Cow, black, branded a figure that looks like a split key, point up, followed by a printed A bar under, on left ribs	Nov. 25, 1911	Dec. 15, 1911	Jan. 30, 1912	36.00	17.25
McFetridge, G. H.	Consort	Mare, bay, no visible brand	Sept. 10, 1911	Sept. 30, 1911	July 12, 1912	55.00	43.00
" "	"	Mare, pinto, branded T inverted Y, on right shoulder, and reversed C G, bar over, on left hip	Sept. 10, 1911	Sept. 30, 1911	July 12, 1912	125.00	111.30
" "	"	Gelding, roan, weight 1000 pounds, nine years old, branded lazy split key on left shoulder, rowlock on left thigh, and what looks like half lazy reversed L with half lazy 6 stroked through it on right hip, also X with circle on top at left end, on right hip	June 15, 1912	June 29, 1912	Sept. 23, 1912	30.00	24.60
McLeod, J. C.	Edgerton	Heifer, two years old, red and white spotted, white head, has horns, two under left eye, no brand visible	Nov. 15, 1911	Feb. 29, 1912	June 17, 1912	46.00	31.80
McKnight, W. A.	Leduc	Gelding, light chestnut or dark sorrel, ten years old, weight 1000 pounds, white star on forehead, light colored mane and tail, no visible brand	June 1, 1912	Oct. 31, 1912	Dec. 28, 1912	79.00	63.02
Niddrie, Wm.	Mound	Heifer, two years old, little white on belly, branded J K bar on left ribs,, and inverted Y followed by Y upper half diamond over, on right ribs	Dec. 1, 1911	Dec. 15, 1911	Mar. 5, 1912	19.00	4.00
Neilson, J. H.	Mannyberries	Cow, red and white, branded G inverted T bar over, on left side	Mar. 1, 1912	June 15, 1912	Aug. 13, 1912	30.00	22.35

Paul, John........	Ft. Sask...........	Gelding colt, black, white on each hind foot, weight about 800 pounds, about 18 months old, no brand visible	Oct. 7, 1911	Nov. 15, 1911	Jan. 13, 1912	87.00	71.87
Pithouse, H. G....	New Sarepta......	Mare, dark bay, two old wire cuts on front fetlock, one old wire cut on left arm, weight about 1000 pounds, about nine years old, no visible brand...	Jan. 14, 1912	Mar. 15, 1912	Apr. 13, 1912	126.00	107.38
" "	" "	Heifer, dark red, yearling, mulley, little white under back of belly, no visible brand	July, 1912	Nov. 31, 1912	Dec. 23, 1912	15.50	5.15
Putland, C. A....	Bently............	Steer, coming two years old, black with white markings, no visible brand	Dec. 20, 1911	Jan. 15, 1912	Mar. 26, 1912	12.00	....
Richardson, A. S...	Ben's Lake........	Mare, aged, no visible brand	Dec. 1911	Feb. 29, 1912	Apr. 28, 1912	25.00	7.63
" " ..	" "	Mare, sorrel, aged, white face, no visible brand	Dec. 1909	May 31, 1912	Dec. 7, 1912	26.00	
" " .	" "	Mare, bay, three years old, white stripe down face, one white eye, hind feet white, one front foot white, no visible brand	Dec. 1909	May 31, 1912	Dec. 7, 1912	76.00	104.35
" " .	" "	Gelding, buckskin, two years old, no visible brand ...	Dec. 1909	May 31, 1912	Dec. 7, 1912	40.00	
Ross, T. J.........	Clive..............	Heifer, red, three years old, no visible brand	Jan. 1, 1912	Feb. 15, 1912	May 14, 1912	12.00	....
Ross, John........	Lacombe..........	Cow, three years old, Jersey, no brand	Nov. 25, 1911	Dec. 15, 1911	Feb. 3, 1912	35.50	16 20
Reid, Wm. J......	Ranfurly...........	Gelding, bay, two white hind feet, small, weight about 700 pounds, three years old, small star and strip on nose	Dec. 1, 1911	Dec. 15, 1911	Feb. 29, 1912	35.00	17.77
Rowe, J. F.......	Round Hill........	Steer, brown, no visible brand	Oct. 15, 1911	Jan. 15, 1912	Mar. 25, 1912	30.00	13.15
Sheppard, H. N...	High River........	Cow, red, white on belly and flank, star in forehead, short tail, three years old, no visible brand	Jan. 1912	Feb. 15, 1912	May 25, 1912	35.00	18.85
" " ..	"	Gelding, gray, nearly white, aged, branded 71 with lazy V over, on right hip and O, on right shoulder	Aug. 1, 1912	Sept. 15, 1912	Dec. 21, 1912	40.00	22.10
" " ..	"	Steer, black, with white face, one year old, no visible brand	May 15, 1912	June 15, 1912	Dec. 28, 1912	49.00	34.03
" " ..	"	Gelding, bay, branded what looks like a large left vertical quarter circle attached to centre of small left vertical three quarter circle on left jaw, and A 1, bar over, on left shoulder, also horizontal bar on left hip	May 5, 1912	May 31, 1912	Dec. 28, 1912	2.00	....
Sobey, R. E.......	High River........	Cow, red, aged, hind feet white, short tail, branded N K followed by bar in line with top of letter, on left side of neck	Dec. 1, 1911	Dec. 15, 1911	Mar. 12, 1912	35.00	22.73
" "	"	Cow, red, white on belly and flank, star in face, short tail, three years old, no brand visible	Aug. 20, 1911	Feb. 15, 1912	Apr. 12, 1912	20.00	6.25
" "	"	Heifer, red roan, one year old, left horn off, no brand visible	Nov. 1911	Feb. 29, 1912	Apr. 22, 1912	18.00	8.20
" "	"	Gelding, brown, white spot in face, aged, saddle marks, two white hind feet, branded S on right shoulder	June 1912	June 30, 1912	Nov. 9, 1912	8.50	2.54
" "	"	Cow, spotted, three years old, branded 4 U bar over, on left side......................................	June 1912	June 20, 1912	Nov. 9, 1912	34.00	26.85
" "	"	Gelding, brown, aged, collar marks on shoulder, branded T with hook attached at bottom and bar over, on left shoulder, dim brand on left thigh	Jan. 1912	July 31, 1912	Oct. 26, 1912	40.00	33.40

SALES OF ESTRAY ANIMALS UNDER THE STRAY ANIMALS ORDINANCE FROM JANUARY 1st TO DECEMBER 31st, 1912—(Continued)

Justice	Address	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Proc'ds of Sale	Sent to Department
Stacey, Jas.	Magrath	Gelding, black, branded L X on left thigh, and blotched brand on right shoulder	Jan. 1, 1912	June 15, 1912	Sept. 30, 1912	$71.00	$65.30
Serpeant, Jas.	Altcrado	Pony, black, gelding, about 1,100 pounds, twelve years old, branded inverted V followed by B, on left shoulder	July 20, 1911	Aug. 15, 1912	May 9, 1912	50.00	42.55
" "	"	Mare, light bay, with small colt running at side, white spot in face, two white hind feet, no visible brand	July 20, 1911	Aug. 15, 1912	May 9, 1912	66.00	58.50
Sullivan, O. D.	Hardisty	Steer, red with white face, and belly, two years old, branded S U with two quarter circles over, on right hip	Oct. 15, 1911	Nov. 15, 1911	Feb. 22, 1912	21.00	7.00
Stroyan, Wm.	Perbeck	Heifer, red, two years old, brockled faced, mulley, white under belly, no visible brand	Jan. 1, 1912	Jan. 31, 1912	Mar. 25, 1912	29.00	13.58
Shantz, O. S.	Didsbury	Cow, roan, drooped horns, branded U P, with upper quarter circle under and lazy double two-tined fork over, on left ribs	Sept. 1, 1912	Mar. 15, 1912	May 22, 1912	50.00	36.50
" "	"	Gelding, buckskin, cayuse, aged, branded script capital X on left shoulder, and S on right thigh, right hind foot white, right front foot grown out long	Apr. 15, 1912	May 31, 1912	Aug. 19, 1912	12.50	2.70
" "	"	Steer, red, about two years old, mulley, branded J E, upper half diamond over, on right ribs	Nov. 15, 1911	Apr. 15, 1912	July 4, 1912	25.50	10.25
" "	"	Mare, bay, white strip in face, branded 7 on left jaw, lazy K on left shoulder and reversed K on left flank	May 15, 1912	June 30, 1912	Sept. 10, 1912	75.00	64.30
Thorne, W. B.	Aldersyde	Gelding, two years old, white star in forehead, two white hind feet, bay, no brand visible	May 1911	June 15, 1911	May 4, 1912	12.00	5.15
" "	"	Gelding, bay, two years old, small star in forehead, no visible brand	May 1911	June 15, 1911	May 4, 1912	10.00	5.20
" "	"	Mare, bay, aged, branded upper half circle followed by 7 (monogram on left shoulder	May 5, 1911	June 15, 1911	May 14, 1912	18.00	9.51
" "	"	Mare, sorrel, probably ten years old, white strip in face, white hind feet, branded reversed L, or it might be lazy L, on left shoulder	Jan. 24, 1912	Apr. 30, 1912	Aug. 8, 1912	65.00	57.08
" "	"	Mare, bay, nine or ten years old, weight about 1050 pounds, collar marks on shoulder, branded what looks like monogram 4 F, on right shoulder, brand is blotched	Jan. 24, 1912	Apr. 30, 1912	Aug. 8, 1912	60.00	52.25
" "	"	Gelding, bay, white star, left hind foot white, advertised as eight years old, branded J F with lazy F over, on left shoulder	Dec. 1911	June 30, 1912	Nov. 9, 1912	60.00	50.80

Thorne, W. B.	Aldersyde	Filly, black, branded monogram lazy H lazy D, on left shoulder	Dec. 8, 1911	June 30, 1912	Nov. 9, 1912	45.00	37.43
Tweed, J. G.	Cochrane	Pony mare, bay, white strip on face, hind pastern white, no visible brand, foal at foot	July 19, 1912	Aug. 2, 1912	Oct. 10, 1912	40.00	31.50
Towns, A. A.	Haneyville	Cow, light roan, seven years old, round hole in left ear, indistinct brand on left thigh, it looks like a lazy 3 with half circle over	Nov. 1, 1911	Mar. 31, 1912	May 1, 1912	48.00	
” ”	”	Heifer, red roan, three years old, mulley, no visible brand	Nov. 1, 1911	Mar. 31, 1912	May 1, 1912	38.00	89.15
” ”	”	Heifer, red roan, two years old, no visible brand	Nov. 1, 1911	Mar. 31, 1912	May 1, 1912	40.00	
” ”	”	Calf, steer, red and white, no visible brand	Nov. 1, 1911	Mar. 31, 1912	May 1, 1912	22.00	
Thomson, E. V.	Dog Pound	Gelding, sorrel, four years old, white face, four white feet, no visible brand	Dec. 1, 1911	Apr. 15, 1912	June 26, 1912	36.50	24.50
Turner, W. E.	Ponoka	Mare, pinto, aged, branded J J on right stifle, crippled in both front feet	Nov. 25, 1911	Dec. 15, 1911	Feb. 26, 1912	21.00	4.70
” ”	”	Steer, red, star in forehead, white spots on side, branded 43, bar over, bob tail, brand on right ribs	Nov. 25, 1911	Dec. 15, 1911	Feb. 26, 1912	14.00	. . . .
Tolman, A. R.	Rumsey	Steer, black, branded round topped T followed by a vertical bar, upper half circle connected at bottom under, on left hip	Jan. 9, 1912	Jan. 31, 1912	Apr. 13, 1912	42.00	23.45
” ”	”	Cow, black, branded 6 T lower half circle over, on right ribs, and blotched K, on left shoulder	Jan. 28, 1912	Feb. 15, 1912	May 11, 1912	17.00	.95
” ”	”	Steer, red, branded D X bar over, on right ribs, two years old	Jan. 28, 1912	Feb. 15, 1912	May 11, 1912	35.00	18.40
Trayer, B.	Whitebrush	Heifer, yearling, red and white, no visible brand	Dec. 15, 1911	Jan. 15, 1912	Mar. 25, 1912	25.00	9.40
Vanderlip, W.	Ribstone	Mare, gray, about sixteen years old, no visible brand	Oct. 6, 1911	Mar. 31, 1912	May 25, 1912	37.00	24.83
Whiteside, F.	Castor	Gelding, buckskin, no visible brand	Dec. 1, 1911	Dec. 31, 1911	Feb. 27, 1912	160.00	143.05
” ”	”	Gelding, brown or bay, no visible brand	Dec. 1, 1911	Dec. 31, 1911	Feb. 27, 1912	100.00	84.70
Wallace, J.	Red Deer	Mare, bay, white stripe in face, two white hind feet, seven years old, weight about 1300 pounds, branded L Y lazy 3 over, on left shoulder	Nov. 1911	Dec. 15, 1911	Feb. 29, 1912	73.00	56.93
” ”	”	Steer, red, rising three years, has horns, white in forehead, white on three feet, and on top of shoulder, branded K X upper half diamond over, on left shoulder	Nov. 20, 1911	Jan. 15, 1912	Mar. 23, 1912	44.00	28.65
” ”	”	Steer, red, rising three years, has horns, no ear marks, no brand visible	Dec. 1, 1911	Dec. 31, 1911	Apr. 17, 1912	35.00	19.88
” ”	”	Cow and calf, white spots, dehorned, bob tail, a V mark cut in the end of left ear, branded D reversed L, bar over, on top of left hip, or it might be D reversed 6, white faced bull calf at foot	Jan. 6, 1912	Feb. 29, 1912	July 3, 1912	23.50	6.96
Wilcox, J. B.	Manfred	Steer, yearling, white and red, white face, red nose, white under belly, small horns, no visible brand.	Nov. 1911	Nov. 30, 1911	Feb. 12, 1912	21.50	5.35
” ”	”	Steer, yearling, red, little white under belly, white spot on each flank, branded U with bar down through it, followed by a lazy Y with vertical bar up from it followed by a half lazy inverted Y, on right ribs	Nov. 1911	Dec. 15, 1911	Feb. 24, 1912	29.00	12.13

SALES OF ESTRAY ANIMALS UNDER THE STRAY ANIMALS ORDINANCE FROM JANUARY 1st TO DECEMBER 31st, 1912—(Continued)

Justice	Address	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Proc'ds of Sale	Sent to Department
Wilcox, J. B.	Manfred	Colt, horse, three years old, bay, white face, hind legs white, branded R A bar under, and bar over, on left thigh	Nov. 1, 1911	Jan. 15, 1912	Mar. 15, 1912	$120.00	$101.90
" "	"	Heifer, two years old, branded bar followed by inverted round topped T, followed by a figure that looks like a Y or an inverted bell, and two reversed 3's under, on right ribs	Nov. 1911	Jan. 15, 1912	Mar. 23, 1912	18.00	2.85
Welsh, McKenzie	Barons	Cow, brindle, has horns, about eight years old, branded inverted U with U over connected, followed by lazy Y, on right side of neck	May 17, 1911	Aug. 15, 1911	Jan. 18, 1912	39.00	28.88
" "	"	Mare ,sorrel, about six years old, blotched brand on left side of jaw, both hind legs white, right front foot white, star in forehead, gray hairs in mane and tail, weight 1250 pounds, white spot on left eye	Apr. 12, 1912	May 15, 1912	July 31, 1912	80.00	72.30
" "	"	Gelding, gray, weight 950 pounds, about six years old, both hind feet and left front foot white, branded monogram P L, on right shoulder, and 7, or reversed inverted L with short horizontal bar extending from middle of right side, on left hip	Jan. 1, 1912	Aug. 15, 1912	Oct. 29, 1912	65.00	55.05
Whillons, R. N.	Kingman	Cow, red roan, dehorned, no brand visible, calf at foot, born on place	Aug. 15, 1910	Dec. 15, 1911	Feb. 23, 1912	48.00	19.92
" "	"	Calves, two heifer, one red, white star on forehead, one red and white, white star on forehead, no brands	Nov. 15, 1911	Jan. 31, 1912	Apr. 13, 1912	35.00	11.60
" "	"	Mare, bay, about eight or nine years old, branded J, on left shoulder, indistinct brand	Oct. 14, 1911	Jan. 15, 1912	Mar. 21, 1912	75.00	59.90
" "	"	Colt, iron grey, one year old, no visible brand	Oct. 14, 1911	Jan. 15, 1912	Mar. 21, 1912	46.00	31.75
Whitten, A. L.	Chigwell	Mare, dark bay, white spot on forehead, about four years old, branded U, on right shoulder	June 1911	Jan. 31, 1912	Apr. 27, 1912	110.00	92.90
" "	"	Mare, dark bay, about ten years old, white spot in forehead, no visible brand	June 1911	Jan. 31, 1912	Apr. 27, 1912	72.00	55.85
" "	"	Heifer, black, two years old, part of one ear cut off, has horns, no visible brand	Sept. 20, 1911	Jan. 31, 1912	Apr. 27, 1912	22.00	7.45
" "	"	Heifer, roan, two years old, has horns, no visible brand	Dec. 1, 1911	Jan. 31, 1912	Apr. 27, 1912	25 00	12.85
" "	"	Steer, red, with white spot in forehead, two years old, no visible brand	Dec. 1, 1911	Jan. 31, 1912	Apr. 23, 1912	30.00	17.70
Whitson, G. H.	Mannville	Heifer, red, mulley, two years old, two white spots on forehead and white spot back of foreleg, no brand	Nov. 15, 1911	Feb. 15, 1912	June 3, 1912	46.00	28.20

Whiting, W. H.	Lawsonburg	Gelding, pony, bay, about 700 pounds, white hind feet, branded reversed S on right thigh, and L with lazy S monogram) over, on right shoulder, four years old	Oct. 15, 1911	Nov. 15, 1911	Mar. 26, 1912	30.00	19.08
Wilson, T. E.	Banff	Gelding, pony, black, sixteen years old, branded a figure that looks like a turnip on right shoulder.	May 1, 1911	Oct. 15, 1911	Jan. 2, 1912	35.00	23.05

ENTIRE ANIMALS.

During the year the following animals were taken up and sold under the provisions of The Entire Animals Ordinance:

SALES OF ESTRAY ENTIRE ANIMALS UNDER THE ENTIRE ANIMALS ORDINANCE, FROM JANUARY 1st TO DECEMBER 31st, 1912.

Justice	Address	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Proc'ds of Sale	Sent to Department
Barber, F. H.	Vermilion	Stallion, dark brown, two years old, old scar near knee, white strip in face, small inferior animal, no visible brand	Aug. 14, 1912	Aug. 31, 1912	Nov. 9, 1912	$50.50	$.....
Corneille, C. G.	Camrose	Stallion, black, white spot on forehead, white spot on tip of nose, about two years old, no visible brand	May 13, 1912	May 31, 1912	June 28, 1912	57.00	37.10
Church, Edwin	Youngstown	Bull, about 14 months old, red, no visible brand	June 6, 1911	Nov. 15, 1911	Feb. 1, 1912	10.00	
Campbell, Wm.	Holden	Bull, black, one year old, red along back and in head, red around nose, no visible brand	Jan. 1912	Jan. 15, 1912	Apr. 12, 1912	9.50	
Davidson, D.	Daysland	Stallion, bay, two years old, white star and strip, white hind feet, branded 2 with circle around it, on right hip	June 22, 1911	July 15, 1911	Aug. 14, 1912	31.00	14.03
" "	"	Bull, red, yearling, star, strip in face, white strip on shoulder, and down left hip, no brand	Nov. 1, 1911	Dec. 15, 1911	Apr. 5, 1912	15.00	.07
Disher, Geo. H.	Chipman	Bull calf, red and white, no visible brand	Nov. 15, 1911	Nov. 30, 1911	Jan. 31, 1912	14.00	....
" "	"	Bull, red, two and a half years old, no visible brand	Oct. 23, 1911	Dec. 31, 1911	Feb. 9, 1912	20.00	....
Fleming, A. W.	Ohaton	Bull, red and white, about nine months old, no visible brand	Nov. 7, 1911	Nov. 30, 1911	Feb. 3, 1912	11.50	....
Jones, C. R.	Wheat Belt	Bull calf, red, no visible brand	Nov. 8, 1911	Dec. 30, 1911	Mar. 2, 1912	23.50	13.95
Kennedy, Thomas.	Ulster	Bull, red, ring in nose, red cross breed, horns sawed off, appears very old, hairs off in patches, skin bare in most parts, halter or wire mark on neck, no visible brand	Dec. 1, 1911	Jan. 3, 1912	Mar. 19, 1912	40.00	6.00
Krafting, H. E.	Asker	Stallion, bay, about 22 months old, no visible brand	Jan. 9, 1912	Jan. 15, 1912	Mar. 8, 1912	34.00	19.65
Mennie, R. H.	Andrew	Bull, red and white all over body, 18 months old, short horns, end of left horn broken off, no visible brand	July 1911	Nov. 15, 1911	Jan. 20, 1912	12.50	....
McIntyre, N.	Vegreville	Bull, two years old, red and white, has horns, no visible brand	Aug. 4, 1912	Aug. 15, 1912	Oct. 1, 1912	35.00	12.85
Neilson, J. H.	Manyberries	Stallion, bay, right hind foot white, small spot in forehead, weight about 1100 pounds, six or seven years old, no visible brand	Aug. 6, 1912	Sept. 15, 1912	Oct. 19, 1912	90.00	67.95
Pinnell, F.	Alix	Bull, rising one year old, spotted and white, some white on face, no visible brand or marks	Feb. 1, 1912	Feb. 15, 1912	Mar. 18, 1912	18.50	....
Putland, C. A.	Bentley	Bull, coming three years old, white star on face, no visible brand	Nov. 1, 1911	Feb. 15, 1912	May 4, 1912	25.00	....
Ross, John	Lacombe	Stallion, brown, mane clipped, weight about 700 pounds, branded three horizontal bars, one over the other, on left shoulder	June 5, 1912	June 30, 1912	July 27, 1912	16.40	....
Sobey, R. E.	High River	Bull, black, one year old, no visible brand	Dec. 1, 1911	Dec. 15, 1911	Mar. 12, 1912	15.00	....
Shantz, O. S.	Didsbury	Bull, white face, Hereford, no visible brand	Feb. 7, 1912	Feb. 15, 1912	Mar. 29, 1912	28.50	1.75
Welsh, M.	Barons	Stallion, bay colt, both hind feet white, no brand	July 22, 1912	Aug. 15, 1912	Oct. 25, 1912	45.00	18.60

POUND DISTRICTS.

With the rapid settlement of the Province an increasing demand is constantly being made for the curtailing of the liberties of range stock. The settler has a right to protection, but the fair thing to do in many cases is difficult of decision. Consequently, where the enforcement or non-enforcement of a law depends upon a vote of a majority of the proprietors of land, some disappointment and occasionally hardship is bound to occur. In other cases a few homesteaders may tie up several townships and prevent many herds of stock pasturing.

A large number of pound districts were created during the year and a few cancelled. The following is a complete list of the districts organized during the year:

No. 1—Township 3, Range 17, excepting Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 17 and 18, all west of the 4th Meridian.

No. 2—Township 4, Range 11, west of the 4th Meridian.

No. 3—Township 4, Ranges 17 and 18, west of the 4th Meridian.

No. 4—Sections 31 to 32 in Township 8, Range 15; Sections 31 to 36 inclusive in Township 8, Range 16; Sections 5, 6, 7, 8, 17, 18, 19, 20, 29, 30, 31 and 32, in Township 9, Range 15; Sections 1 to 30 inclusive and Sections 33, 34, 35, 36, in Township 9, Range 16, all west of the 4th Meridian.

No. 5—Township 13, Range 10, west of the 4th Meridian.

No. 6—Township 14, Range 9, Township 15, Ranges 7, 8 and 9, west of the 4th Meridian.

No. 7—Townships 15 and 16, Ranges 1 and 2, west of the 4th Meridian.

No. 8—Township 16, Range 9, west of the 4th Meridian.

No. 9—Township 16, Range 20, west of the 4th Meridian; Township 17, Range 19, west of the 4th Meridian; Township 17, Range 20, west of the 4th Meridian; and Sections 1, 12, 13, 24, 25 and 36 in Township 17, Range 21, west of the 4th Meridian.

No. 10—Township 24, Range 3, and north half of Township 23, Range 3, west of the 4th Meridian.

No. 11—Townships 25 and 26, Ranges 2 and 3, west of the 4th Meridian.

No. 12—Township 26, Range 10, west of the 4th Meridian.

No. 13—Township 27, Range 6, west of the 4th Meridian.

No. 14—Townships 27 and 28, Ranges 7 and 8, west of the 4th Meridian.

No. 15—Township 28, Range 2, west of the 4th Meridian.

No. 16—Township 28, Range 6, west of the 4th Meridian.

No. 17—Township 29, Range 1, west of the 4th Meridian.

No. 18—Township 29, Range 2, west of the 4th Meridian.

No. 19—Township 29, Range 7, west of the 4th Meridian.

No. 20—Township 29, Range 8, west of the 4th Meridian.

No. 21—Townships 31 and 32, Ranges 7 and 8, west of the 4th Meridian.

No. 22—Township 34, Range 4, west of the 4th Meridian.

No. 23—Township 44, Ranges 11 and 12, west of the 4th Meridian.

No. 24—Townships 64 and 65, Range 21, east half (½) of Townships 64 and 65, Range 22, and west half (½) of Townships 64 and 65, Range 20, all west of the 4th Meridian.

The following is a list of the animals sold under the provisions of the Ordinance, the proceeds of the sales having been deposited with the Government in a trust account and obtainable by the owner on showing satisfactory proof of ownership:

SALES OF IMPOUNDED ANIMALS UNDER THE POUND DISTRICT ORDINANCE, FROM JANUARY 1st TO DECEMBER 31st, 1912.

Justice	Address	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Proc'ds of Sale	Sent to Department
Gibson, F. W.	Irricana	Gelding, bay, about 1050 pounds, branded J or JT monogram on left jaw and W B quarter circle under, on left thigh	July 30, 1912	Sept. 15, 1912	Oct. 3, 1912	$100.00	$ 79.95
" "	"	Mare, roan, about 900 pounds, branded lazy L with small cross over connected to right end of the lazy L, on left hip	July 30, 1912	Sept. 15, 1912	Oct. 3, 1912	82.50	62.80
" "	"	Mare, bay, about 800 pounds, branded script capital E, with upper half diamond over, on right thigh	July 30, 1912	Sept. 15, 1912	Oct. 3, 1912	55.00	36.00
McIvor, J. S.	Kitscoty	Cow, red and white, dehorned, no visible brand	Sept. 9, 1912	Oct. 15, 1912	Oct. 29, 1912	40.00	17.00
Rodgers, A. E.	Stavely	Heifer, red, branded T reversed L, lower quarter circle under, on left shoulder, and rowlock Y with the stems of both connected at bottom by a horizontal line, on left ribs	July 26, 1912	Aug. 31, 1912	Sept. 20, 1912	20.00	7.85
" "	"	Cow and calf, red with white face, cow branded 88 on left ribs, tag in right ear marked M B 6008, calf not branded, about three months old	July 26, 1912	Aug. 15, 1912	Sept. 4, 1912	57 00	46.97
" "	"	Steer, red, large brand on right ribs, looks like C with upper half diamond stroked through the bottom of the C, followed by rowlock, bar, not certain about first part of brand	July 26, 1912	Aug. 15, 1912	Sept. 4, 1912	57 00	46.97
Wood, J. O.	Beaumont	Calves, four red and white spotted, no visible brand	Sept. 6, 1912	Sept 30, 1912	Oct. 29, 1912	55.00	7.26
Mitchell, A. E.	Alsask	Mare, light bay, aged, weight about 1100 pounds, white hind feet, white star in forehead, white spot on nose, branded 16 connected with bar at bottom on left thigh and 3R, on right shoulder	May 21, 1912	June 29, 1912	July 28, 1912	107.00	87.65
Orr, Andrew W.	Dinton	Mare and foal, mare, black, about 1050 pounds, with right hind foot about as large as a pail, branded H 2 on left shoulder	July 26, 1912	Aug. 31, 1912	Oct. 8, 1912	35.00	19.95
" " "	"	Gelding, bay, white strip in forehead, white on left hind foot, wire cut on same hock joint, has been saddle horse, weight about 1000 pounds, small lump on under side of left jaw, branded what looks like monogram lazy U H, on both jaws	Sept. 18, 1912	Oct. 15, 1912	Nov. 19, 1912	65.00	46.50
Oakley, H. C.	Vermilion	Pigs, five Fenworth breed, no marks	Aug. 8, 1912	Aug. 31, 1912	Sept. 30, 1912	104.00	32.25
Tricker, W. E.	Swalwell	Cow, red, mulley, branded T Y bar over, on right shoulder	Dec. 14, 1912	Dec. 31, 1912	Feb. 21, 1912	40.00	28.50
Miles, H. L.	Barney	Mare and colt, mare, black, branded circle over small circle on left shoulder and T connected to 2, on left thigh	June 19, 1912	July 15, 1912	Aug. 19, 1912	175.00	152.50

SALES OF IMPOUNDED ANIMALS UNDER THE POUND DISTRICT ORDINANCE, FROM JANUARY 1st TO DECEMBER 31st, 1912.—(Continued.)

Justice	Address	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Proc'ds of Sale	Sent to Department
Marrin, Russell....	Barney............	Gelding, grey, weight 1400 pounds, branded M with S and lazy S under, on left shoulder	July 15, 1912	Aug. 15, 1912	Sept. 9, 1912	97.00	80.40
" "	"	Stallion, bay, two years old, weight about 500 pounds, no visible brand	Sept. 20, 1912	Sept. 30, 1912	Nov. 6, 1912	40.00	18.90
Bowen, M. L.......	Maleb.............	Mare, roan, six to eight years old, branded reversed C followed by an incomplete square, or it might be D followed by reversed E, on right hip........	Dec. 15, 1911	Jan. 15, 1912	Feb. 12, 1912	58.00	42.75
Goddard, E.........	Goddard.....	Gelding, bay, about 1000 to 1200 pounds, two white feet, mane and fringe cut short, had halter and twenty-five feet of rope when impounded, branded 2--1, on left flank, about ten years old......	Aug. 10, 1912	Aug. 31, 1912	Oct. 7, 1912	84.00	72.35
Byers, H. W.......	Taber.............	Bull, red and white, six months old, no visible brand	Nov. 22, 1912	Dec. 15, 1912	Dec. 30, 1912	7.00	....
" "	"	Heifer, white, age six months, no visible brand......	Nov. 22, 1912	Dec. 15, 1912	Dec. 30, 1912	13.00	8.75
" "	"	Bull, roan, six months old, no visible brand.........	Nov. 22, 1912	Dec. 15, 1912	Dec. 30, 1912	7.00	....
" "	"	Bull, red and white, six months old, no visible brand	Nov. 22, 1912	Dec. 15, 1912	Dec. 30, 1912	12.00	8.75
Yaggy, C. W.......	Warner............	Mare, roan, four white feet, blaze face, weight about 1000 pounds, probably four years old, branded what appears to be an imperfect L.N., on left shoulder	Oct. 11, 1912	Oct. 31, 1912	Dec. 14, 1912	78.00	56.30
" "	"	Gelding, star, white right hind foot, weight 1000 pounds, about nine years old, branded what appears to be H L bar under, on right shoulder..	Oct. 11, 1912	Oct. 31, 1912	Dec. 14, 1912	65.50	43.10
" "	"	Gelding, strawberry roan, black legs below knees, weight 800 pounds, quite old ,branded H K monogram on right thigh............................	Oct. 11, 1912	Oct. 31, 1912	Dec. 14, 1912	21.50	1.20
Reads, Harry......	Suffield...........	Gelding, black, blotched brand on left jaw, weight about 100 pounds	Aug. 6, 1912	Aug. 15, 1912	Dec. 12, 1912	26.00	7.60
Pawson, W. H.....	Coaldale...........	Gelding, bay, about four years old, branded N over O, left shoulder	Oct. 3, 1912	Oct. 15, 1912	Nov. 14, 1912	155.00	140.25
" "	"	Mare, gray, about two years old, branded U 2, on right thigh	Sept. 27, 1912	Oct. 15, 1912	Nov. 14, 1912	120.00	105.10
" "	"	Gelding, brown, both hind feet white, branded H upper quarter circle over on right thigh, also H upper quarter circle over, and lower quarter circle under, on left shoulder..........................	Sept. 27, 1912	Oct. 15, 1912	Nov. 14, 1912	20.00	7.70
" "	"	Mare, bay, small star in face, about three years old, no visible brand...............................	Jan. 12, 1912	Jan. 31, 1912	Feb. 28, 1912	78.00	64.05
" "	"	Mare, bay, about two years old, branded R C or E C on left shoulder..................................	Jan. 12, 1912	Jan. 31, 1912	Feb. 28, 1912	76.00	62.10
" "	"	Mare, sorrel, aged, branded lazy B, on right hip....	Jan. 12, 1912	Jan. 31, 1912	Feb. 28, 1912	55.00	41.55

Pawson, W. H.	Coaldale	Bull, black and white, dehorned, yearling, no visible brand	Sept. 9, 1912	Sept. 30, 1912	Oct. 30, 1912	20.00	21 85
" "	"	Gelding, sorrel, four white feet, weight 950 pounds, about four years old, branded M, on left thigh	Sept. 13, 1912	Sept. 30, 1912	Oct. 30, 1912	49 00	28.25
" "	"	Gelding, aged, pinto pony, crop eared, indistinct brand on left shoulder	Jan. 12, 1912	Jan. 31, 1912	Feb. 28, 1912	26.00	13.35
" "	"	Mare, sorrel, about three years old, brand on left thigh resembling a suspended mallet, lower quarter circle under, also an indistinct brand on right shoulder	Jan. 12, 1912	Jan. 31, 1912	Feb. 28, 1912	70.00	58.40
" "	"	Gelding, bay, white star in face, about two years old, branded lazy B over 78, on right thigh	Mar. 1, 1912	Mar. 15, 1912	Apr. 27, 1912	45.00	30.60
" "	"	Gelding, bay, aged, branded lazy B, on right thigh and an indistinct brand on left thigh	Jan. 12, 1912	Jan. 31, 1912	Feb. 28, 1912	37.00	23.95
" "	"	Gelding, black, about four years old, lame in left front foot, branded monogram H L and monogram M P, on left thigh	Nov. 3, 1912	Nov. 15, 1912	Dec. 13, 1912	15.00	3.95
" "	"	Gelding, roan, with halter, weight about 1200 pounds, about eight years old, branded plus sign over straight bar, on right shoulder	Oct. 8, 1912	Oct. 31, 1912	Nov. 28, 1912	20.00	8.25
" "	"	Mare, iron gray, about seven years old, weight about 800 pounds, no visible brand	Nov. 24, 1912	Nov. 30, 1912	Dec. 28, 1912	50.00	39.20
" "	"	Mare, brown, white at roots of tail, aged, indistinct brand on right shoulder, resembling monogram P L	Nov. 3, 1912	Nov. 15, 1912	Dec. 13, 1912	16.00	4.90
Rodeback, Jas.	Raymond	Mare, bay, weight about 1050 pounds, both hind feet white, wire cut on left hind leg, foretop clipped, has collar marks on, branded upper half diamond with inverted round topped T under and bar over, on left thigh	June 3, 1912	June 5, 1912	July 23, 1912	81.00	69.78
" "	"	Gelding, black, about three years old, small white spot in forehead, no visible brand	Feb. 29, 1912	Mar. 15, 1912	Apr. 22, 1912	35.00	25.58
" "	"	Gelding, black, three or four years old, white spot in forehead and on end of nose ,branded what looks like monogram lazy Y J, the hook of the J turned down, on left thigh	Feb. 29, 1912	Mar. 15, 1912	Apr. 22, 1912	75.00	64.58
" "	"	Mare, black, about six years old, branded reversed E, followed by E, on right shoulder, about 900 pounds, left front white	Feb. 29, 1912	Mar. 15, 1912	Apr. 22, 1912	92.00	81.15
" "	"	Gelding, brown, aged, weight about 1100 pounds, white spot in forehead and on end of nose, left knee large, both hind feet white, blotched brand on left shoulder, has collar marks	Feb. 29, 1912	Mar. 15, 1912	Apr. 22, 1912	15.00	6.08
Long, W. S.	Altorado	Steer, red, yearling, white face, slit in brisket, no visible brand	Jan. 22, 1912	Feb 15, 1912	Mar. 11, 1912	18.00	....
Ashmore, T. A.	Mundare	Calf, bull, bright red, one year old, no visible brand	Nov. 1, 1911	Jan. 15, 1912	Apr. 11, 1912	15.50	....
Martin, John	Lost Lake	Gelding, dappled grey, lame in left foot, branded a side sided figure, on left thigh square without rght side, followed by inverted V, or C inverted V, on left shoulder, weight about 1200 pounds	July 27, 1912	Aug. 15, 1912	Oct. 4, 1912	86.00	70.15

HERD DISTRICTS.

Many applications have been made for the organization of Herd Districts in the area outside of that in which they may be formed. It would appear that the provisions of this Ordinance would be acceptable over a much wider area than it now serves.

During the year only three animals were sold under the provisions of the Ordinance. They are as follows:

SALES OF IMPOUNDED ANIMALS UNDER THE HERD DISTRICT ORDINANCE, FROM JANUARY 1st TO DECEMBER 31st, 1912.

Justice	Address	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Proc'ds of Sale	Sent to Department
Wilson, Geo. H....	Islay..............	Mare, dark brown, star in forehead, three years old, branded lazy S on left shoulder..................	Aug. 2, 1912	Aug. 15, 1912	Sept. 16, 1912	$ 56.00	$ 44.65
" " " ...	"	Gelding, sorrel, white strip in face, left hind foot white, little white on forehead, about fifteen years old, weight 850 pounds, no visible brand..	Oct. 22, 1912	Nov. 15, 1912	Dec. 16, 1912	22.50	6.75
Feinberg, H. A.....	Greenlawn.........	Cow, red and white, about three or four years old, bob tail, good set of horns, no visible brand, spring calf at foot, red and white, steer, no visible brand.......................................	Oct. 12, 1912	Nov. 15, 1912	Nov. 30, 1912	55.00	33.10

STOCK INSPECTION.

During the year a number of stock inspectors were appointed at new stations that have gradually risen to importance on old lines of railway, and quite a number at leading points on new lines. With the rapidly growing mileage of new railways each year is likely to see a large increase in the number of stock inspectors. Assistance was again given the Western Stock Growers' Association in maintaining an efficient man as stock inspector at Winnipeg. As a result of this inspector's work a large number of animals were found to have been shipped without authority. The inspector collected from the shipper the market value of all such animals. The amount so collected, together with a correct dscription of the animal and the brands thereon, were forwarded to the secretary of the association who located the owners as far as he was able. A description of the unlocated balance was forwarded to the Department and the animals duly advertised in the supplement to the official Gazette. A number of those advertised are nearly always claimed. The proceeds of those unclaimed is placed in the general trust account and may be claimed any time within twelve months, after which it passes into the general revenue of the Province.

The accompanying table gives the usual statistics regarding the shipments of stock in the Province:

No. 1.—Rosalind of Old Basing.

Jersey Cow. Owned by C. A. Julian-Sharman, Red Deer, Alberta. Produced from February 25th, 1909, to September 17th, 1912, 37,847.25 lbs. Milk and 2,504.09 lbs. of 80 per cent. Butter.

STOCK STATISTICS FOR ALBERTA. Calculated from returns received up to December 31st, 1912.

Shipping Point	Inspector	EXPORTS.				Local Shipments		Total	
		East		West					
		Cattle	Horses	Cattle	Horses	Cattle	Horses	Cattle	Horses
Acme	D. J. Witwer	30	297	1,297	37	2,053	81	3,380	415
Airdrie	Leslie Farr	...	...	300	10	464	89	764	99
Aldersyde	Wm. B. Way	9	19	...	...	...	15	9	34
Alix	Horace Hickling	268	...	289	...	488	51	1,045	51
Bashaw	J. A. Windsor	58	...	310	...	366	...	734	...
Bassano	W. S. Playfair	...	98	...	117	65	399	65	614
Bawlf	K. O. Eaggen	122	11	117	...	626	94	865	105
Blackfalds	Jos. Capron	...	...	181	5	253	39	434	44
Botha	W. A. Armstrong	...	...	...	...	166	1	166	1
Bowden	P. McDermott	6	18	237	35	909	30	1,152	83
Bow Island	H. E. Beattie	52	37	...	...	28	49	80	86
Brocket	C. H. Clarke	...	...	...	...	...	9	...	9
Brooks	Jas. Gregory	925	103	...	52	2,389	518	3,314	673
Bruce	Jas. Wildie	...	...	...	...	...	34	...	34
Calgary	P. D. Sanders	1,351	1,093	14,389	298	6,950	4,892	22,690	6,283
Camrose	W. G. Duggan	11	43	110	13	1,725	299	1,846	355
Cardston	F. Falconer	952	102	923	57	817	1,089	2,692	1,248
Carstairs	Robt. Scott	134	70	1,376	30	889	392	2,399	492
Castor	N. McCarthy	157	16	456	4	1,112	212	1,725	232
Cayley	L. Beaton	235	...	4,390	8	1,931	91	6,556	99
Champion	W. A. Carmichael	...	...	4	4	2	5	6	9
Chigwell	Arthur Burnet	...	...	38	...	41	2	79	2
Chipman	Andrew Watson	...	3	2	4	1,300	...	1,302	7
Claresholm	C. W. James	165	12	451	27	103	316	719	355
Clive	Jno. T. Reynolds	...	...	423	...	1,242	15	1,665	15
Cochrane	A. R. McKay	50	132	1,128	75	630	90	1,008	297
Coronation	A. A. Towns	...	...	...	...	23	67	23	67
Coutts	Wm. T. Patton	...	16	328	...	4,678	131	5,006	147

STOCK STATISTICS FOR ALBERTA. Calculated from returns received up to December 31st, 1912.—Continued

Shipping Point	Inspector	EXPORTS				Local Shipments		Total	
		East		West					
		Cattle	Horses	Cattle	Horses	Cattle	Horses	Cattle	Horses
Cowley	P. J. Biddell	2	88	285	64	275	51	562	203
Crossfield	Wm. Urquhart	10	16	290	49	479	312	779	377
Czar	Chas. Houcher	492	...	...	...	362	4	854	4
Daysland	D. Davidson	70	7	69	...	1,571	105	1,710	112
Didsbury	H. B. Atkins	26	183	308	7	1,485	130	1,819	320
Donalda	J. R. Graham	110	...	159	...	11	...	280	...
Edberg	W. F. Wendt	83	...	...	...	69	...	152	...
Edmonton	J. H. Pickering	4	463	...	5	156	572	160	1,040
Erskine	Oliver Gibbon	407	...	375	...	393	20	1,175	20
Ferintosh	F. Kuhnke	...	...	19	...	18	38	37	38
Fort Saskatchewan	J. Graff	...	...	...	...	698	61	698	61
Gadsby	J. E. McElhone	199	9	290	3	365	26	854	38
Gleichen	Thos. Henderson	859	1,096	1,489	8	4,387	442	6,735	1,546
Grassy Lake	Wm. Salvage	460	42	4	12	639	7	1,103	61
Greenshields	Chas. F. Gibson	...	...	...	...	...	...	...	...
Halkirk	W. H. Taylor	...	...	20	...	9	8	29	8
Hardisty	Arthur Wood	24	23	...	2	64	119	88	144
High River	Chas. E. Fisk	54	172	2	95	652	487	708	754
Holden	A. E. Stewart	...	...	128	...	488	12	616	12
Innisfail	Alfred Aspinall	39	4	316	24	2,007	313	2,362	341
Innisfree	A. A. Loftus	...	...	...	...	752	2	752	2
Irricana	Wm. Dennis	155	17	186	...	354	73	695	90
Irvine	Carl Beny	155	108	...	...	4	89	159	197
Islay	D. H. Moore	2	...	...	...	222	44	224	44
Killam	J. H. Caldwell	10	8	...	...	114	38	124	46
Kitscoty	W. Marshall	77	...	...	...	231	63	308	63
Lacombe	Jas. P. Kent	6	144	285	14	1,409	289	1,700	447
Lamont	F. C. Smith	70	...	...	...	1,312	...	1,382	...

Lavoy	Fred Pass	...	...	...	...	86	5	86	5
Leduc	Thos. Hull	4	8	...	...	947	38	951	46
Lethbridge	C. W. Lowther	31	131	19	206	489	869	539	1,206
Lloydminster	Hiram Miller	12	4	...	...	104	2	116	6
Lundbreck	W. S. Knight	...	...	...	4	16	19	16	23
Magrath	Benj. Matkin	...	21	181	...	342	6	523	27
Macleod	R. G. Mathews	180	689	39	52	618	486	837	1,227
Mannville	R. D. Irland	43	7	...	...	527	5	579	12
Medicine Hat	J. H. G. Bray	1,210	1,623	1,059	12	2,845	1,354	5,114	2,989
Millet	Alex Minard	...	...	...	...	191	34	191	34
Minburn	E. Huffman	...	...	...	...	...	10	...	10
Mirror	W. D. Cook	...	...	...	...	...	...	...	...
Morinville	Nick Hittinger	...	...	...	...	638	82	638	82
Morley	Frank L. Wellman	...	68	17	...	...	41	17	109
Mundare	J. H. C. Milne	40	...	...	...	505	7	545	7
Nanton	Peter McElroy	6	34	158	30	29	240	193	304
Nevis	A. E. Bedford	...	...	135	...	82	16	217	16
New Norway	Evan Olstad	...	...	22	...	95	14	117	14
Ohaton	A. W. Fleming	2	14	...	...	135	4	137	18
Okotoks	Geo. C. S. Paterson	...	203	7	2	804	131	811	336
Olds	Thos. McKercher	568	63	3,527	51	3,255	479	7,350	593
Penhold	J. M. Hart	...	62	164	...	584	35	748	97
Pincher Creek	Ed. McRae	20	18	998	72	215	157	1,233	247
Ponoka	A. Reid	233	19	267	36	1,606	217	2,106	272
Provost	Jas. Carter	40	41	...	...	21	95	61	136
Ranfurly	Albert Labelle	...	...	2	...	...	...	2	...
Raymond	T. J. O'Brien	...	...	1,125	21	3,251	72	4,376	93
Red Deer	F. L. Cottle	115	2	61	20	1,066	577	1,242	599
Round Hill	Wm. Ross	...	...	154	...	151	7	305	7
Ryley	P. N. Kjosness	...	...	...	8	215	...	215	8
Sedgewick	Jno. Burn	77	41	3	4	471	156	551	201
Stavely	I. B. Robertson	...	...	...	12	13	104	13	116
Stettler	J. C. Blain	406	...	2,080	8	1,352	152	3,838	160
Stony Plain	Thos. Davis	...	...	...	...	14	1	14	1
Strathcona	R. Wainwright	23	166	3	72	321	1,101	347	1,339
Strathmore	Oscar Moorehouse	91	10	925	15	1,045	319	2,061	344

STOCK STATISTICS FOR ALBERTA. Calculated from returns received up to December 31st, 1912.—Continued

Shipping Point	Inspector	EXPORTS				Local Shipments		Total	
		East		West					
		Cattle	Horses	Cattle	Horses	Cattle	Horses	Cattle	Horses
Strome	W. E. Phipps	281	15	7	11	525	79	813	105
Taber	Neil Neilson	...	76	11	11	6	88	17	175
Tees	F. E. Allison	42	...	262	...	236	9	540	91
Tofield	R. A. Mackenzie	...	...	431	...	680	54	1,111	54
Vegreville	A. A. Harkness	15	40	...	...	3,487	79	3,502	119
Vermilion	H. Woods	18	22	180	2	1,672	108	1,870	132
Wainwright	C. F. Gibson	35	3	21	...	1,770	9	1,826	12
Walsh	Lachlan Sinclair	727	172	1,654	...	523	246	2,904	418
	Total	12,058	8,002	44,486	1,708	78,708	19,822	135,252	29,532

II.—CROPS.

WEATHER CONDITIONS AND STATISTICS.

The following tables regarding the weather conditions prevailing during the year have been obtained through the Dominion Meterological Office at Toronto and is the work largely of a corps of voluntary observers throughout the Province:

Maximum and Minimum Temperatures for Meterological Stations in Alberta for 1912.

STATIONS		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Alix	Maximum	42.0	46.0	54.0	75.0	84.0	85.0	78.0	80.0	73.0	71.0	56.0	55.0
	Minimum	-49.0	-25.0	-20.0	-15.0	26.0	32.0	34.0	33.0	21.0	9.0	8.0	-13.0
Athabasca Landing	Maximum	39.0	45.0	55.0	65.0	87.0	93.0	83.0	81.0	81.0	75.0	51.0	52.0
	Minimum	-47.0	-34.0	-28.0	21.0	22.0	25.0	31.0	29.0	18.0	8.0	-30.0	-30.0
Blairmore	Maximum	....	57.2	50.9	...	....	....	....	....	....	....	....	....
	Minimum	....	-15.3	-21.0	....	....	....	....	....	....	....	....	....
Banff	Maximum	45.0	38.8	51.3	59.1	76.9	85.7	82.9	79.1	73.1	58.0	....	37.6
	Minimum	-37.6	-20.4	-20.4	17.0	24.4	30.2	33.8	32.0	23.4	4.9	....	-4.0
Calgary	Maximum	48.0	49.0	60.0	65.0	82.0	90.0	79.0	82.0	72.0	70.0	....	51.0
	Minimum	-30.0	-7.0	-16.0	14.0	28.0	29.0	33.0	30.0	25.0	15.0	....	0.0
Daysland	Maximum	37.0	38.0	51.0	65.0	84.0	90.0	81.0	78.0	75.0	65.0	53.0	50.0
	Minimum	-48.0	-29.0	-29.0	24.0	25.0	26.0	32.0	31.0	18.0	15.0	10.0	-16.0
Didsbury	Maximum	50.0	54.0	58.0	66.0	80.0	88.0	80.0	80.0	72.0	74.0	56.0	56.0
	Minimum	-34.0	-40.0	-8.0	20.0	28.0	30.0	32.0	32.0	26.0	15.0	6.0	0.0
Endiang	Maximum	38.0	37.0	51.0	69.5	81.0	91.0	78.0	75.0	71.0	70.0	50.5	48.0
	Minimum	-40.0	-23.0	-24.0	9.4	25.2	28.7	34.7	31.7	19.2	16.7	-12.0	-3.0
Edmonton	Maximum	48.0	50.0	58.0	69.0	86.0	89.0	82.0	81.0	78.0	74.0	54.0	44.7
	Minimum	-46.0	-20.0	-17.0	23.0	29.0	32.5	35.0	35.0	22.0	15.0	-2.0	-18.0
Halkirk	Maximum	43.0	49.0	57.0	69.0	80.0	92.0	78.0	77.5	66.5	66.0	45.0	47.0
	Minimum	-38.0	-14.0	-16.0	26.0	30.0	32.0	36.0	31.0	22.0	17.5	-7.0	-10.0
Harmattan	Maximum	53.0	51.0	58.0	64.0	80.0	88.0	77.0	80.0	75.0	70.0	58.0	59.0
	Minimum	-32.0	-14.0	-27.0	11.0	21.0	21.0	29.0	24.0	18.0	8.0	5.0	-9.0

Maximum and Minimum Temperatures for Meterological Stations in Alberta for 1912.

STATIONS		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
High River	Maximum	47.0	47.0	62.0	65.0	....	91.0	....	....	72.0	....	....	....
	Minimum	-32.0	-12.0	-35.0	15.0	....	25.0	....	....	20.0	....	....	....
Hillsdown	Maximum	45.0	44.3	56.0	68.0	82.0	88.0	79.0	83.0	71.0	70.0	56.5	53.0
	Minimum	-40.0	-21.0	-18.0	18.0	30.0	30.0	32.6	31.0	18.0	11.0	-3.0	-10.0
Lacombe Ex. Farm	Maximum	42.4	46.8	54.8	62.9	82.7	89.6	78.5	84.5	75.8	70.6	58.3	58.6
	Minimum	-46.0	-23.5	-20.0	17.9	23.5	25.5	30.5	30.1	20.8	13.6	2.9	-10.6
Lethbridge	Maximum	50.9	50.2	63.9	75.0	89.0	98.0	....	....	....	....	....	....
	Minimum	-27.2	-18.5	-17.9	18.8	27.0	30.2	....	....	....	....	....	....
Lethbridge Ex. Farm	Maximum	48.6	49.2	63.3	71.0	82.8	94.8	86.6	88.7	....	72.2	55.7	48.2
	Minimum	-30.5	-23.5	-22.5	17.4	23.6	32.0	36.0	34.1	....	14.2	10.1	-0.9
Loveland	Maximum	39.0	39.0	52.0	69.0	84.0	91.0	78.0	77.0	....	....	48.0	48.0
	Minimum	-46.0	-28.0	-28.0	18.0	26.0	29.0	35.0	32.0	19.0	17.0	2.0	-16.0
Lunnford	Maximum	43.0	50.6	57.0	66.4	86.2	85.8	81.0	81.0	79.0	70.0	55.2	54.0
	Minimum	-56.6	-32.2	-31.0	15.0	22.8	27.0	28.0	26.4	18.0	5.0	-16.0	-28.8
Macleod Police	Maximum	48.0	50.0	62.0	69.0	82.0	99.0	86.5	87.0	74.5	74.0	57.5	50.0
	Minimum	-34.0	-17.0	-16.0	19.0	26.0	30.0	39.0	39.0	26.0	20.0	12.0	4.0
Medicine Hat	Maximum	43.0	47.0	61.0	74.0	88.0	102.0	94.0	93.0	78.0	74.0	....	52.0
	Minimum	-33.0	-15.0	-18.0	25.0	27.0	34.0	38.0	37.0	20.0	20.0	....	4.0
Pakan	Maximum	40.5	43.7	57.0	63.9	85.7	90.0	....	78.0	74.0	65.0	48.5	....
	Minimum	-52.0	-34.0	-31.0	13.9	25.0	25.1	31.8	31.9	13.0	10.9	-4.0	....
Parkland	Maximum	43.0	45.0	62.0	72.0	72.0	89.0	....	....	....	64.0	....	....
	Minimum	-35.0	-19.0	-20.0	12.0	28.0	26.0	....	....	....	20.0	....	....

Maximum and Minimum Temperatures for Meterological Stations in Alberta for 1912.

STATIONS		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Playle Creek	Maximum	46.6	4.35	54.3	57.7	....	....	....	....	....	....	....	....
	Minimum	–29.1	–16.0	–14.0	10.6	....	....	....	....	....	....	....	....
Sion	Maximum	45.0	50.0	54.0	66.0	88.0	94.0	84.0	82.0	75.0	68.0	58.0	....
	Minimum	–45.0	–23.0	–16.0	20.0	22.0	24.0	30.0	29.0	19.0	8.0	0.0	....
Sundial	Maximum	44.0	46.0	62.0	71.0	96.5	99.5	88.5	90.5	74.0	74.0	57.0	56.0
	Minimum	–37.0	–20.0	–20.0	12.0	27.0	27.0	40.0	35.0	21.0	13.0	–3.0	–5.0
Waitefield	Maximum	37.0	40.5	51.0	65.0	86.2	93.0	78.4	79.0	75.2	69.8	42.1	47.0
	Minimum	–49.0	–29.4	–31.0	13.4	26.0	30.9	31.0	30.5	16.6	14.0	5.0	–24.0
Pembina	Maximum	....	84.5	56.0	66.0	....	88.0	77.0	85.0	....	87.0	58.0	....
	Minimum	....	–27.0	–39.0	0.0	....	....	30.0	35.0	....	8.5	–22.0	....
Dunvegan	Maximum	....	44.0	....	....	....	....	....	....	....	....	....	....
	Minimum	....	–30.5	....	....	....	....	....	....	....	....	....	....
Lesser Slave Lake	Maximum	....	....	....	....	....	....	....	....	....	....	....	....
	Minimum	....	–30.0	....	....	....	....	....	....	....	....	....	....
Peace River Crossing	Maximum	33.0	....	57.0	64.0	89.0	89.0	88.0	88.0	....	68.0	....	....
	Minimum	–53.0	....	–30.0	17.0	26.0	29.0	34.0	29.0	....	8.0	....	....
Pincher Creek	Maximum	48.0	....	....	....	....	....	74.0	84.0	73.0	73.0	57.0	45.0
	Minimum	–33.0	....	....	....	....	....	34.0	36.0	20.0	11.0	5.0	3.0
Fort Vermilion (1)	Maximum	26.9	35.0	51.2	60.5	103.0	98.0	89.0	98.0	78.5	66.0	41.0	46.0
	Minimum	–58.0	–48.0	–38.0	11.0	22.0	29.0	28.0	23.5	9.0	9.0	–15.9	–43.5
Fort Vermilion (2)	Maximum	21.8	26.0	54.5	64.0	92.5	98.2	86.5	101.0	81.0	69.0	44.0	47.0
	Minimum	....	–8.0	–38.0	9.9	27.5	32.1	25.0	28.0	9.0	12.0	4.0	–45.0

Maximum and Minimum Temperatures for Meterological Stations in Alberta for 1912.

STATIONS		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Gleichen	Maximum	....	....	58.0	60.0	80.5	91.0	81.0	83.0	72.0	72.0	55.0	49.0
	Minimum	....	....	–18.0	17.0	28.0	31.5	38.0	29.0	22.0	14.0	6.0	–4.0
Brooks	Maximum	....	....	....	78.0	96.0	....	85.0	89.0	76.0	72.0	....	....
	Minimum	....	....	....	21.0	29.0	....	34.0	33.0	12.0	13.0	....	....
Oyen	Maximum	....	....	70.1	86.0	84.5	....	83.7	83.0	....	....	....	....
	Minimum	....	....	18.2	21.0	23.1	....	34.6	32.0	....	....	....	....
Delia	Maximum	....	34.8	52.0	63.5	79.6	94.2	78.2	79.1	....	68.0	50.7	46.7
	Minimum	....	–17.0	–17.0	17.5	25.0	27.0	35.0	32.0	....	17.5	9.5	–10.0
Wetaskiwin	Maximum	....	50.0	67.0	....	90.0	89.0	82.0	83.0	....	....	....	....
	Minimum	....	–21.0	13.0	....	20.0	32.0	40.0	30.0	....	....	....	....
Nanton	Maximum	....	....	....	....	....	....	81.0	88.0	79.0	....	48.0	41.0
	Minimum	....	....	....	....	....	....	35.0	33.0	23.0	....	2.0	2.0
Berry Creek	Maximum	....	....	50.0	....	86.0	96.0	....	....	....	....	....	....
	Minimum	....	....	–35.0	....	20.0	22.0	....	....	....	....	....	....
Campsie	Maximum	....	....	....	....	....	....	....	....	78.5	69.1	55.9	54.0
	Minimum	....	....	....	....	....	....	....	....	14.4	5.0	–1.2	–27.0
Redlow	Maximum	....	....	....	....	....	....	....	....	....	69.0	50.0	50.0
	Minimum	....	....	....	....	....	....	....	....	....	–5.0	–7.0	–18.0
Moose	Maximum	....	....	....	....	....	....	75.5	75.4	72.5	58.9	30.0	42.5
	Minimum	....	....	....	....	....	....	36.0	25.9	8.0	9.8	2.0	–26.0

MONTHLY PRECIPITATION FOR 1912.

STATIONS	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
Alix	.40	.32	.50	.99	2.33	2.60	5.33	3.00	1.58	1.00	2.10	T	20.15
Athabasca Landing	.65	.26	.50	1.13	.72	1.72	2.65	2.56	.72	.74	.22	.51	12.38
Banff	.94	.20	.32	1.35	1.06	3.02	5.03	3.94	1.03	1.81	...	.37	*19.07
Bardo	.35	.00	.15	.52	1.35	3.09	4.12	2.58	.68	.61	.40	.00	13.85
Berry Creek	...	...	...	...	3.46	2.14	...	...	...	...	...	...	* 5.60
Beaver Mines	...	...	...	...	...	...	...	...	...	...	.51	.61	* 1.12
Bismark	.56	.00	T	3.00	.29	3.01	3.02	4.47	1.01	1.53	.32	T	17.21
Bittern Lake	.98	.20	.27	.50	2.62	2.68	4.39	3.82	1.96	.84	.50	.05	18.81
Blairmore	...	.11	.33	...	...	...	...	...	...	...	...	...	* .44
Brooks (1)	.31	...	...	1.74	2.37	...	.87	.64	1.73	.37	...	...	* 8.08
Brooks (2)	...	.20	.12	1.35	2.70	1.94	1.65	.54	1.54	1.04	.21	.07	*11.36
Bruderheim	.80	.25	.32	1.32	...	...	...	...	...	...	...	...	* 2.69
Caldwell	2.20	.15	1.12	1.07	1.32	2.02	3.80	1.52	1.96	2.86	...	.42	*18.02
Calgary	.60	.08	.34	2.05	1.42	4.31	5.20	2.75	2.30	1.09	...	T	*20.14
Campsie	.88	.05	.73	.78	1.60	1.88	...	2.64	.35	.92	.73	.14	*10.70
Claresholm	...	...	...	...	...	...	...	...	...	.77	1.09	.21	* 2.07
Coleman	...	...	...	...	...	...	...	...	...	.90	1.45	1.50	* 3.85
Conjuring Creek	...	...	...	3.60	3.21	...	5.30	6.08	...	...	...	...	*18.19
Cowley	...	...	...	...	...	...	...	...	...	1.00	1.68	.60	* 3.28
Daysland	.73	.30	.00	.51	2.16	.75	9.08	5.26	1.06	.32	.59	.11	20.87
Delia	.57	.07	.02	.45	.84	...	5.15	3.41	2.25	.72	.55	.20	*14.23
Didsbury	.10	.10	.40	1.62	2.67	2.68	5.46	3.95	2.23	1.91	.70	.20	22.02
Dorenlee	1.00	T	.20	.84	2.48	2.63	4.07	2.59	1.19	1.00	.45	.00	16.45
Dunvegan	...	.37	...	...	...	...	...	...	...	...	...	...	* .37
Eckville	...	.02	...	...	...	...	...	...	...	...	...	...	* .02
Edmonton	1.15	.16	.40	1.57	2.35	3.03	4.76	4.41	1.12	.73	.40	.10	20.18
Endiang	.30	.15	.05	.76	2.44	3.26	4.07	5.08	.88	.48	.30	T	17.77
Fort Vermilion (1)	.20	.32	.09	.73	.57	.17	.53	1.80	3.43	.60	1.12	.25	9.81
Fort Vermilion (2)	.15	.60	.27	.47	...	.25	1.37	3.32	.90	.70	.55	1.60	*10.18
Five Lakes	1.06	.16	.58	.83	1.78	2.32	4.36	3.81	.52	.85	.21	.19	16.67
Gleichen	...	...	...	1.63	1.21	1.23	2.83	.58	.35	2.50	...	...	*10.34

Grassy Lake............	.00	.10	.30	.30	.10	.60	.35	3.25	.60	...	...	.00	* 5.60
Halkirk................	.46	.02	T	0.62	3.40	3.73	4.38	6.11	1.16	1.21	.54	T	21.63
Harmattan..............	.59	.12	.45	1.15	2.43	2.85	7.96	3.09	2.44	1.09	.25	.20	22.62
High River.............	1.25	...	...	2.30	...	3.06	...	...	2.35	...	...	...	* 8.90
Hillsdown..............	.50	.35	.50	1.23	2.37	3.30	6.33	2.66	.77	1.18	...	.11	*15.30
Jumping Pond...........	...	...	.40	2.43	1.95	4.15	9.49	2.97	2.47	2.05	1.47	.20	*27.58
Lacombe Ex. Farm.......	.76	.16	.13	1.29	2.92	3.00	5.29	4.44	1.27	1.56	.93	.08	21.83
Lethbridge.............	.98	.33	.42	.45	.69	1.91	...	...	2.35	1.03	.73	.24	* 9.13
Lethbridge Ex. Farm....	.69	.40	.44	.20	.66	1.73	2.78	1.41	2.61	1.07	.99	.23	13.21
Lineham................	.12	.87	1.00	.96	1.60	4.15	8.61	2.30	.43	2.02	1.22	.40	23.68
Lesser Slave Lake......	...	.20	...	...	...	...	...	...	...	...	...	...	* .20
La Pearl...............	...	...	.24	...	1.32	1.01	4.31	3.31	1.37	...	...	...	*11.56
Loch Sloy..............	...	...	...	...	...	...	...	...	...	...	...	...	* ...
Loveland...............	1.55	...	T	.10	2.61	2.56	5.49	6.35	1.31	.45	.02	T	*20.44
Lunnford...............	2.01	T	.80	.73	1.79	2.09	5.60	3.25	.52	1.06	.02	.30	18.17
Macleod (Police).......	.70	.12	.10	.67	.61	1.65	3.32	2.01	2.01	.50	.70	.32	12.71
Macleod	1.45	.50	.80	.27	.68	3.22	3.35	.89	2.52	1.51	1.50	.60	17.29
Lyndon.................	1.25	.47	.91	1.09	1.30	2.81	7.73	2.00	2.12	2.65	1.02	.51	23.86
Manyberries............	...	...	...	...	...	...	...	...	...	...	...	...	* ...
Maycroft...............	.73	.60	.48	1.21	1.10	2.95	4.44	.99	1.35	1.88	2.08	.46	18.27
Medicine Hat...........	.70	.18	.30	.94	1.63	1.19	.98	1.58	1.34	.58	...	.36	* 9.78
Moose..................	...	...	...	...	...	...	2.55	1.60	.85	...	.30	.30	* 5.60
Mountain View..........	...	...	...	...	...	...	...	...	...	.50	1.20	.30	* 2.00
Nanton (1).............	...	...	...	...	.82	3.88	6.72	1.06	3.32	1.90	.30	.00	*18.00
Nanton (2).............	...	...	...	...	...	...	3.36	1.18	3.91	...	.80	.35	* 9.60
Okotoks................	T	.12	.05	1.64	1.61	3.68	6.63	1.45	2.16	T	.20	T	17.54
Oyen...................	...	...	...	.51	1.85	...	2.91	2.45	...	...	...	...	* 7.72
Pakan..................	.50	.37	.90	.91	1.10	3.38	3.88	3.48	.69	.70	.36	...	*15.77
Parkland	.70	.20	.20	.94	.28	2.43	...	...	...	1.05	...	...	* 6.00
Peace River Crossing...	.80	...	...	...	.80	.71	1.24	1.24	...	.59	...	...	* 5.38
Pembina................	...	...	...	...	...	1.67	8.00	1.24	...	.45	.35	...	*11.71
Pekisko................	1.07	.77	1.12	2.13	1.30	4.88	5.43	1.07	2.59	2.62	2.40	.30	25.68
Pincher Creek..........	.71	...	...	...	...	...	4.39	1.17	1.34	1.50	.18	.11	* 9.40
Ponoka.................	.86	.75	.45	...	.15	2.93	5.12	2.82	.93	...	...	...	*14.01
Playle Creek...........	.97	.40	.65	1.35	...	...	...	...	...	...	...	...	* 3.37

MONTHLY PRECIPITATION FOR 1912.

STATIONS	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
Priddis	...	...	...	.95	1.13	3.25	5.59	...	...	...	...	...	*10.92
Redlow	.64	.50	...	1.37	.59	.96	2.13	2.80	.11	.14	...	.36	* 9.60
Seven Persons	.40	.15	.30	.79	1.33	2.24	1.05	.49	1.80	.55	.20	.45	9.75
Sion	1.42	.42	1.10	1.56	2.21	3.13	4.20	...	...	.98	.68	...	*15.70
Sundial	...	...	...	.41	1.14	1.54	3.03	...	1.69	.75	.20	...	* 8.76
Three Hills Creek	...	...	...	...	...	...	...	...	...	...	...	...	* ...
Waitcfield	.77	.41	.30	.52	.92	2.80	5.04	3.14	1.39	1.02	.49	.23	17.03
Wetaskiwin	...	...	...	...	...	4.25	5.16	3.10	...	...	...	...	*12.51
Writing on Stone	...	...	...	...	...	...	...	...	1.00	.57	.36	.55	* 2.48
Waterlow Mills	...	...	...	...	...	...	...	...	...	...	2.22	1.90	* 4.12

* Reports cover only part of the year.

ANNUAL PRECIPITATION FROM 1899 TO 1912, INCLUSIVE.

Stations.	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912
Alix	.....	.....	.....	.....	.....	.....	* 2.87	13.00	*13.91	14.15	14.39	*10.29	22.34	20.15
Athabasca Landing	.....	.....	.....	.....	.....	.....	*11.69	* 0.45	.....	.....	* 6.29	*16.49	17.03	12.38
Banff	26.34	23.29	19.27	30.59	24.82	14.80	16.00	14.88	23.54	21.05	21.56	16.32	19.17	*19.07
Bantry	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13.74	* 0.11	.....	.....
Bardo	.....	.....	.....	.....	.....	.....	.....	.....	*15.59	*18.05	11.65	*10.49	16.94	13.85
Beaver Mines	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* 1.12
Berry Creek	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* 5.60
Bismark	.....	.....	.....	.....	.....	.....	.....	.....	18.14	*17.04	10.88	*11.68	*30.18	17.21
Bittern Lake	.....	.....	.....	.....	.....	.....	.....	.....	*17.19	*18.51	*11.53	*13.80	20.10	18.81
Blairmore	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* 6.54	*20.52	* .44
Brooks (1)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10.96	* 6.90	17.60	* 8.08
Brooks (2)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*11.36
Bruderheim	.....	.....	.....	.....	.....	.....	*13.29	.....	*12.07	*12.06	*11.03	*13.56	*18.68	* 2.69
Bon Accord	.....	.....	.....	.....	.....	.....	*11.46	17.63	14.52	24.97	16.20	.....	.....	.....
Caldwell	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37.04	*18.02
Calgary	14.94	26.15	17.57	22.31	34.57	22.77	14.84	16.24	14.96	18.25	16.03	12.03	19.99	*20.14
Campsie	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*14.02	17.43	*10.70
Cardston	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*13.20	*27.84	18.19
Claresholm	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* 2.07
Coleman	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* 3.85
Conjuring Creek	.....	.....	.....	.....	.....	.....	.....	.....	18.57	*18.59	*13.63	* 4.05	* 4.02	*18.19
Coutts	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* 2.10	.....	.....
Cowley	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.28
Daysland	.....	.....	.....	.....	.....	.....	.....	.....	.....	*14.65	* 0.60	*10.31	* .65	20.87
Delia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*14.78	*14.23
Didsbury	.....	.....	23.07	25.13	21.80	14.26	21.72	22.07	*27.11	*21.89	20.99	*17.48	23.35	22.02
Dorenlee	.....	.....	.....	.....	.....	.....	.....	.....	19.50	18.60	*15.99	* 5.10	26.54	16.45
Dunvegan	.....	.....	.....	.....	.....	.....	.....	14.49	* 8.66	*11.29	* 8.33	*7.45	.....	* .37
Eckville	.....	.....	.....	.....	.....	.....	.....	.....	.....	*24.33	* 9.44	* 1.88	* 9.84	* .02
Edmonton	20.89	27.82	27.53	20.66	21.06	19.86	15.36	*13.48	16.62	17.89	14.30	14.43	20.67	20.18
Elkwater	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* 7.30	.....	.....

Endiang	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*15.78	17.77
Fort Vermilion (1)	.....	.....	.....	.....	.....	.....	.....	* 8.23	* 3.19	* 3.57	* 9.55	* 1.69	*11.57	9.81
Fort Vermilion (2)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*13.29	*10.18
Fort McMurray	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* 0.00	.....	.....
Five Lakes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*18.55	16.67
Gilt Edge	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* 8.98	*13.40	.....
Gleichen	.....	.....	.....	.....	15.83	*10.22	11.19	16.61	*11.39	*15.89	19.14	* 9.41	*13.63	*10.34
Grassy Lake	.....	.....	.....	.....	.....	.....	.....	.....	* 4.94	* 8.22	* 9.20	* 5.15	11.60	* 5.60
Halkirk	.....	.....	.....	.....	.....	.....	.....	.....	.....	17.55	11.47	*10.04	20.69	21.63
Harmattan	.....	.....	.....	.....	.....	.....	.....	.....	.....	*14.76	* 7.11	*12.09	*19.13	22.62
High River	.....	.....	.....	.....	.....	.....	.....	.....	16.05	15.58	9.31	9.33	17.03	* 8.90
Hillsdown	.....	.....	.....	.....	.....	.....	16.26	16.06	17.51	*18.64	18.16	21.25	23.43	*16.30
Islay	.....	.....	.....	.....	.....	.....	.....	.....	.....	* .68	5.89	* 0.00	.....	.....
Josephburg	.....	.....	.....	.....	.....	.....	.....	.....	11.56	* 9.54	*13.78	* 0.00	.....	.....
Jumping Pond	.....	.....	.....	.....	.....	.....	.....	.....	16.09	20.14	16.88	12.80	*10.13	*27.58
Lacombe	.....	.....	.....	.....	.....	.....	15.04	.....	.....	*17.66	15.34	13.04	* 9.87	.....
Lacombe Ex. Farm	.....	.....	.....	.....	.....	.....	.....	.....	*18.52	*15.33	8.01	13.28	21.44	21.83
La Pearl	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*11.56
Lawrence	.....	.....	.....	.....	.....	.....	.....	.....	12.19	*14.69	11.69	9.66	15.58	.....
Lethbridge	.....	.....	.....	28.13	14.82	11.40	13.78	*22.48	15.50	16.16	11.69	* 5.66	22.16	* 9.13
Lethbridge Ex. Farm	.....	.....	.....	.....	.....	.....	.....	.....	.....	*13.97	10.36	* 7.41	21.19	13.21
Lesser Slave Lake	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* .20
Lineham	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13.46	23.68
Langdon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10.98	* 8.41	.....	.....
Loch Sloy	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* 7.45	24.70	.....
Loveland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*35.70	*14.33	*20.44
Lunnford	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*14.37	19.63	18.14
Lyndon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23.73	23.86
Macleod	19.74	10.08	12.21	10.48	9.73	5.34	11.63	20.82	*12.40	*18.11	*16.05	*8.57	24.34	17.29
Macleod (Police)	.....	.....	.....	.....	.....	.....	.....	.....	*19.48	*11.49	14.88	*8.17	20.52	12.71
Manyberries	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* .80	.....
Maycroft	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22.36	18.27
Medicine Hat	*22.28	22.05	20.80	13.68	9.90	9.70	8.99	11.62	* 6.96	* 9.67	9.80	* 6.45	*16.04	* 9.78
Minda	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* .17	.....
Moose	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* 5.60
Mountain View	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* 2.00
Nanton (1)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*18.00

ANNUAL PRECIPITATION FROM 1899 TO 1912, INCLUSIVE.

Stations.	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912
Nanton (2)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* 9.60
Okotoks	.....	.....	.....	.....	.....	.....	.....	.....	*12.93	19.01	13.52	*10.86	15.41	17.54
Oyen	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* 7.72
Pakan	.....	.....	.....	.....	.....	.....	.....	15.83	*18.32	*27.31	13.91	*23.06	14.56	*15.77
Parkland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* 6.00
Peace River Crossing	.....	.....	.....	.....	.....	.....	.....	.....	* 2.81	*12.33	* 9.05	*10.98	*17.17	* 5.38
Pembina	.....	.....	.....	.....	.....	.....	.....	.....	.....	12.22	4.02	* 6.89	*18.52	*11.71
Pekisko	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*24.02	25.68
Pincher Creek	.....	.....	.....	.....	.....	.....	14.52	*21.63	.....	* 6.82	25.91	*10.82	*19.26	* 9.40
Ponoka	.....	.....	.....	.....	.....	.....	.....	.....	*19.53	17.87	*10.04	*14.61	20.10	*14.01
Playle Creek	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*13.83	* 3.37
Priddis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*10.92
Red Deer	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*17.75	.....
Redlow	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* 9.60
Seven Persons	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*17.53	9.75
Sion	.....	.....	.....	.....	.....	.....	.....	.....	17.11	17.98	20.69	*19.79	24.36	*15.70
Spirit River	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* 7.34	*10.94	.....
Sundial	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12.37	* 8.76
Three Hills Creek	.....	.....	.....	.....	18.53	11.44	18.02	15.25	*13.77	14.29	15.74	* 8.49	*17.13	.....
Tilly	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* 3.04	.....
Waitfield	.....	.....	.....	.....	.....	.....	.....	24.57	17.07	22.87	17.83	13.83	19.00	17.03
Wetaskiwin	.....	.....	.....	.....	20.87	18.10	13.18	16.64	17.97	17.97	13.94	*17.40	36.50	*12.51
Wabamun	.....	.....	.....	.....	.....	.....	.....	.....	20.36	19.97	* 7.67	* 0.00	12.00	.....
Waterlow Mills	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* 4.12
Writing on Stone	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	* 2.48

*Reports cover only part of the year.

HOURS OF SUNSHINE RECORDED, 1912.

STATIONS	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Dunvegan	51.2	108.1	181.7	162.7	306.4	260.6	170.7	164.1	142.4	59.8	*....	9.3	......
Edmonton	73.0	120.2	244.1	178.2	251.8	312.5	192.4	200.8	190.9	150.2	71.9	58.2	2044.2
Fort Vermilion	51.4	88.3	197.3	170.6	288.8	288.5	236.7	194.5	238.7	104.5	53.9	62.9	1687.3
Lacombe	103.5	121.0	203.0	195.0	245.9	300.7	177.1	190.1	175.2	149.4	88.5	73.2	2022.6
Lethbridge	111.7	139.7	230.9	209.0	280.4	322.7	250.3	239.9	169.3	172.9	129.2	102.3	2358.3
Medicine Hat	59.2	110.0	190.7	218.4	250.5	330.2	265.5	206.4	152.9	146.6	*....	65.0	......

*No records furnished.

CROP STATISTICS

The seeding season of 1912 was a disappointing one in many ways. The month of February was so mild and bright that the snow went early and spring was expected right away. In fact some seed was sown quite early. This beautiful weather was followed by a comparatively cold March and April, which, while not conductive to early germination, was favourable to both man and horse in working the land. Owing to the long stretch of fine weather the land was well dried out and worked beautifully; in fact, not in years was the seed bed in better tilth.

This long open season, however, gave opportunity for great loss of moisture and when followed by drouthy conditions told heavily on all crops, but especially the later sown ones. The rainy season was somewhat delayed, in fact in certain districts and on some soils, considerable damage was done. A cool summer following, retarded growth until harvest was somewhat late and some fields were damaged by frost.

Harvesting and threshing conditions were fairly favourable, with the result that practically the most of the grain was threshed before winter set in. The supply of help to garner the crop was, generally speaking, satisfactory. The season was comparatively free from severe hail storms, so that a minimum loss was sustained from that source.

Spring Wheat. The increase in acreage, 26.45 per cent, is not much above the average increase expected from year to year on account of new land being brought under cultivation. That it is not larger may be partly accounted for by the drouthy conditions of the early breaking season interfering with the usual amount of breaking being done, and by the fact that on account of the late wet fall of the previous year little fall ploughing was done. The area seeded to spring wheat compares favourably with that of other years. Although the total quantity of grain is greater, the yield per acre is lower than last year and under the ten year average.

Winter Wheat. The early open spring followed by drouthy conditions was hard on winter wheat. There was a good deal of winter killing, especially in the central portion of the province, and later many fields lost out through lack of sufficient moisture. The greatest damage was, however, done by the open fine weather of February. The acreage finally harvested is below that of previous years and the yield, while good, is below the ten year average.

Oats. The lack of prepared land for early seeding is shown in the large increase in the area devoted to oats, barley and flax. Oats show an increase in acreage of over 46 per cent, while the yield is considerably above the ten year average. Being sown later and thus not so much affected by the drouth the returns have been handsome.

Barley. The acreage sown to barley is more than doubled and indicates the trend that is taking place toward mixed farming.

In conclusion it may be noted that the crops of 1912 were comparatively free from weeds. This was no doubt owing to the excessive moisture of the previous fall causing most of the weed seeds to sprout and thus be destroyed by frost. This was particularly fortunate in view of the drouthy spring, as otherwise the weeds would have made great growth while the crop was halting.

The following tables give the acreage and yield of the various grains by constituencies for the Province, with the exception of the northern districts:

CROP STATISTICS

SPRING WHEAT

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston	1908	234,811	9,371	24.73	20.16
		1909	182,570	8,404	21.72	
		1910	194,513	11,044	17.61	
		1911	424,385	21,570	19.67	
		1912	665,687	38,974	17.08	
2	Macleod	1908	196,248	9,127	20.50	17.06
		1909	344,877	14,500	23.78	
		1910	56,778	10,874	5.22	
		1911	375,440	18,483	20.32	
		1912	317,705	20,523	15.48	
3	Lethbridge	1908	357,432	17,271	20.69	16.92
		1909	686,885	35,270	19.75	
		1910	200,368	29,603	6.77	
		1911	2,767,831	133,686	20.70	
		1912	2.891.082	173,016	16.71	
4	Pincher Creek	1908	10,916	486	22.46	18.53
		1909	28.092	1,287	21.82	
		1910	4.644	559	8.31	
		1911	50,198	2,467	20.35	
		1912	37,031	1,926	19.74	
5	Claresholm	1908	1,081,293	57.209	18.90	16.68
		1909	1,497,621	87,780	17.06	
		1910	423.460	58,134	7.28	
		1911	2.721,764	124,761	21.82	
		1912	2,045,772	111,425	18.36	
6	Medicine Hat	1908	81,370	10,581	7.68	14.26
		1909	317,951	13,945	22.80	
		1910	84,927	12,098	7.02	
		1911	708,502	38,874	18.23	
		1912	1,080.312	69,339	15.58	
7	Nanton	1908	273,127	14,518	18.81	17.97
		1909	407.411	21,267	19.15	
		1910	109.392	22,444	4.87	
		1911	1,038,836	41,341	25.39	
		1912	1,038,509	47,968	21.65	
8	High River	1908	85,256	4,252	20.05	19.78
		1909	139,885	6,559	21.33	
		1910	60.221	10,013	6.01	
		1911	502,921	18,536	27.13	
		1912	453,489	18,982	24.41	
9	Rocky Mountain	1908	....	....	.....	
		1909	....	....	.....	
		1910	....	....	.....	
		1911	....	....	.....	
		1912	....	....	.....	
10	Okotoks	1908	32,954	1,363	24.17	21.93
		1909	81,356	3,990	20.37	
		1910	60,278	4,961	12.15	
		1911	250,303	9,005	27.79	
		1912	257,570	10,225	25.19	

SPRING WHEAT—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
11	Cochrane	1908	2,287	141	16.21	14.91
		1909	8,889	404	21.50	
		1910	3,570	574	6.22	
		1911	13,145	902	14.56	
		1912	10,869	671	16.09	
12	Gleichen	1908	37,085	1,447	25.62	19.03
		1909	159,389	6,670	23.89	
		1910	207,082	21,804	9.50	
		1911	906,770	52,855	17.15	
		1912	862,715	45,334	19.03	
13	Didsbury	1908	21,878	890	24.58	19.72
		1909	72,778	2,966	24.53	
		1910	88,403	8,598	10.28	
		1911	258,287	14,903	17.33	
		1912	374,656	17,123	21.88	
14	Olds	1908	12,635	665	19.00	19.80
		1909	51,780	1,926	26.88	
		1910	46,544	4,114	11.31	
		1911	116,118	5,307	21.88	
		1912	141,914	7,106	19.97	
15	Stettler	1908	194,522	9,386	20.72	18.94
		1909	313,710	16,513	18.99	
		1910	595,639	41,998	14.18	
		1911	836,811	37,060	22.58	
		1912	1,091,554	59,745	18.27	
16	Sedgewick	1908	281,455	16,650	16.90	17.51
		1909	522,373	36,374	14.36	
		1910	1,492,032	79,504	18.77	
		1911	1,810,155	92,960	19.47	
		1912	3,236;124	179,109	18.06	
17	Innisfail	1908	14,728	714	20.62	20.28
		1909	21,508	940	22.87	
		1910	28,105	1,625	17.30	
		1911	26,508	1,111	23.86	
		1912	32,257	1,922	16.78	
18	Red Deer	1908	12,472	598	20.85	21.39
		1909	16,299	727	22.41	
		1910	44,112	359	18.70	
		1911	72,837	3,419	21.30	
		1912	40,923	1,725	23.71	
19	Lacombe	1908	21.186	933	22.70	21.88
		1909	32,930	1,611	20.44	
		1910	111,584	6,831	16.34	
		1911	183,480	7,888	23.26	
		1912	96,912	3,632	26.68	
20	Ponoka	1908	38,825	1,911	20.31	22.22
		1909	43,337	2,106	20.57	
		1910	78,064	3.279	23.81	
		1911	90,153	3,893	23.15	
		1912	99,614	4,317	23.30	

SPRING WHEAT—*Continued*

No	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
21	Westaskiwin	1908	30,438	1,590	19.14	22.73
		1909	28,973	1,295	22.38	
		1910	51,691	2,767	18.68	
		1911	100,886	3,721	27.11	
		1912	115,724	4,391	26.35	
22	Leduc	1908	42,028	2,232	18.82	21.77
		1909	21,256	881	24.17	
		1910	33,986	1,475	23.04	
		1911	42,793	1,917	22.32	
		1912	44,306	2,098	21.12	
23	Camrose	1908	174,935	9,451	18.50	19.65
		1909	139,720	8,144	17.15	
		1910	209,410	14,014	14.94	
		1911	365,768	14,899	24.55	
		1912	369,076	15,949	23.14	
24	Alexandra	1908	108,590	6,081	17.85	16.85
		1909	245,989	12,146	20.52	
		1910	405,575	30,427	13.35	
		1911	591,678	36,264	16.82	
		1912	741,040	47,169	15.71	
25	Vermilion	1908	61,319	4,003	15.31	17.21
		1909	248,260	11,278	22.01	
		1910	373,908	28,075	13.32	
		1911	442,335	24,995	17.70	
		1912	451,357	25,457	17.73	
26	Vegreville	1908	155,416	9,503	16.35	17.65
		1909	199,327	10,033	19.87	
		1910	166,403	15,002	12.56	
		1911	388,928	18,661	20.84	
		1912	306,103	16,430	18.63	
27	Strathcona	1908	64,089	3,247	19.73	22.38
		1909	55,557	2,573	21.59	
		1910	78,281	3,749	20.88	
		1911	115,720	4,528	25.55	
		1912	120,909	5,050	24.15	
28	Stony Plain	1908	63,079	3,190	19.77	17.47
		1909	52,909	2,945	17.96	
		1910	78,325	4,371	17.92	
		1911	115,841	5,487	21.11	
		1912	71,808	6,755	10.63	
29	Lac Ste. Anne	1908	2,349	178	13.19	23.86
		1909	321	9	35.66	
		1910	1,221	46	26.54	
		1911	1,326	61	21.74	
		1912	1,909	86	22.19	
30	Pembina	1908	5,310	270	19.66	18.99
		1909	1,882	114	16.50	
		1910	3,861	203	19.30	
		1911	4,331	213	20.33	
		1912	5,515	292	19.19	

Spring Wheat—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
31	St. Albert	1908	31,649	1,612	19.63	24.29
		1909	13,741	717	19.14	
		1910	12,478	446	27.98	
		1911	14,966	686	21.81	
		1912	16,452	500	32.90	
32	Sturgeon............	1908	58,247	3,219	18.09	21.80
		1909	27,150	1,392	19.50	
		1910	69,393	3,183	21.80	
		1911	46,775	2,096	22.31	
		1912	65,316	2,389	27.34	
33	Victoria	1908	146,942	7,820	18.79	20.26
		1909	146,786	7,484	19.90	
		1910	230,093	12,825	17.94	
		1911	275,436	11,729	23.48	
		1912	258,742	12,204	21.20	
34	Pakan...............	1908	14,035	749	18.73	18.83
		1909	30,041	1,385	21.69	
		1910	39,341	1,824	21.56	
		1911	45,834	2,750	16.67	
		1912	47,383	3,049	15.54	
35	Athabasca	1908	964	31	31.09	204.8
		1909	2,477	105	23.58	
		1910	2,878	194	14.84	
		1911	....	....	.....	
		1912	15,950	1,283	12.43	
36	Peace River..........	1908	22,704	674	33.68	22.72
		1909	11,425	732	15.60	
		1910	29,396	1,476	19.93	
		1911	23,177	878	26.40	
		1912	22,883	1,271	18.00	
	Indian Reserves......	1912	5,606	439	12.77	12.77

Winter Wheat

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston	1908	380,625	14,153	26.89	23.69
		1909	733,626	28,227	25.99	
		1910	598,671	32,189	18.59	
		1911	1,155,096	46,318	24.94	
		1912	722,618	32,738	22.07	
2	Macleod	1908	48,858	1,483	32.94	24.34
		1909	105,557	3,911	26.98	
		1910	18,337	5,580	12.25	
		1911	291,498	9,367	31.12	
		1912	153,385	8,331	18.41	
3	Lethbridge	1908	126,912	4,112	30.86	19.24
		1909	212,852	8,767	24.27	
		1910	40,709	4,580	8.89	
		1911	199,664	14,639	13.64	
		1912	62,535	3,371	18.55	

WINTER WHEAT—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
4	Pincher Creek	1908	218,656	8,175	26.74	22.40
		1909	193,878	8,182	23.69	
		1910	300,288	15,942	18.84	
		1911	494,925	22,594	21.91	
		1912	408,274	19,590	20.84	
5	Claresholm	1908	471,399	16,801	28.05	21.27
		1909	278,989	9,836	28.36	
		1910	67,114	7,054	9.52	
		1911	548,418	23,055	23.80	
		1912	150,640	9,052	16.64	
6	Medicine Hat	1908	8,858	335	26.44	20.31
		1909	33,662	1,382	24.35	
		1910	26,531	1,829	14.50	
		1911	247	12	20.58	
		1912	38,806	2,470	15.71	
7	Nanton	1908	279,617	9,697	28.83	21.69
		1909	153,744	8,039	19.12	
		1910	52,896	4,819	10.98	
		1911	561,238	19,146	29.31	
		1912	177,729	11,654	15.25	
8	High River..........	1908	670,678	21,745	30.84	25.30
		1909	321,389	9,413	34.13	
		1910	110,641	12,840	8.62	
		1911	387,184	13,392	28.91	
		1912	282,213	11,745	24.02	
9	Rocky Mountain.....	1908	214	10	21.40	21.40
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
10	Okotoks	1908	76,751	2,921	26.27	21.29
		1909	47,417	2,713	17.47	
		1910	48,465	3,336	14.53	
		1911	914,542	15,848	27.01	
		1912	34,068	1,608	21.18	
11	Cochrane	1908	44,830	1,691	26.51	17.07
		1909	21,292	1,440	14.78	
		1910	94,251	6,913	13.63	
		1911	36,935	2,244	16.46	
		1912	32,952	2,356	13.98	
12	Gleichen	1908	127,689	3,921	32.55	21.84
		1909	43,821	1,605	27.30	
		1910	94,029	8,682	10.83	
		1911	89,347	4,859	18.38	
		1912	80,766	4,006	20.16	
13	Didsbury	1908	272,121	8,776	31.00	20.87
		1909	42,937	2,096	20.47	
		1910	215,593	13,746	15.68	
		1911	73,794	3,773	19.56	
		1912	65,660	3,720	17.68	

WINTER WHEAT—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
14	Olds	1908	27,824	1,357	20.50	14.78
		1909	33,225	1,739	19.10	
		1910	33,730	2,112	15.97	
		1911	6,392	1,032	6.19	
		1912	8,531	702	12.15	
15	Stettler	1908	17,236	749	23.01	17.30
		1909	2,601	247	10.53	
		1910	1,861	145	12.83	
		1911	25,392	1,311	26.99	
		1912	10,322	709	13.14	
16	Sedgewick	1908	998	75	13.30	17.53
		1909	1,324	77	17.19	
		1910	39,094	2,578	15.16	
		1911	5,854	300	17.68	
		1912	6,697	275	24.35	
17	Innisfail	1908	38,906	1,419	27.41	20.80
		1909	7,436	404	15.92	
		1910	39,713	1,897	20.93	
		1911	19,257	984	19.57	
		1912	10,974	544	20.17	
18	Red Deer	1908	34,363	1,121	30.65	21.30
		1909	15,350	963	15.94	
		1910	49,117	2,878	17.07	
		1911	1,778	690	25.78	
		1912	9,887	578	17.10	
19	Lacombe	1908	28,624	1,136	25.19	19.90
		1909	20,231	1,270	15.92	
		1910	91,034	3,905	23.31	
		1911	31,570	2,535	12.45	
		1912	32,323	1,427	22.65	
20	Ponoka	1908	5,627	252	22.32	19.34
		1909	9,794	550	17.88	
		1910	11,625	635	18.31	
		1911	18,175	733	24.79	
		1912	2,578	192	13.42	
21	Wetaskiwin	1908	1,906	99	19.25	20.93
		1909	9,314	418	22.27	
		1910	34,031	1,631	20.87	
		1911	59,813	2,470	24.22	
		1912	6,534	362	18.05	
22	Leduc	1908	8,492	310	27.39	21.18
		1909	3,063	193	15.87	
		1910	27,074	1,131	23.89	
		1911	26,856	1,144	23.47	
		1912	14,734	963	15.30	
23	Camrose	1908	3,180	146	21.78	19.86
		1909	5,233	328	15.95	
		1910	17,598	1,078	16.32	
		1911	11,603	556	20.87	
		1912	7,670	314	24.42	

WINTER WHEAT—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
24	Alexandra.	1908	92	5	18.40	21.19
		1909	32	1	32.00	
		1910	21,266	1,331	15.98	
		1911	15,913	708	22.47	
		1912	25,967	1,518	17.10	
25	Vermilion	1908	781	41	19.04	16.35
		1909	31	3	10.33	
		1910	5,256	288	18.25	
		1911	504	37	13.89	
		1912	162	8	20.25	
26	Vegreville	1908	2,271	97	23.41	18.71
		1909	1,612	210	7.67	
		1910	19,177	1,271	15.09	
		1911	1,823	84	21.70	
		1912	8,530	332	25.69	
27	Strathcona	1908	8,155	271	30.09	26.18
		1909	4,595	159	28.90	
		1910	15,157	671	22.59	
		1911	23,848	858	27.79	
		1912	3,427	159	21.55	
28	Stony Plain	1908	7,940	401	19.80	17.02
		1909	10,198	710	14.35	
		1910	45,640	1,918	23.71	
		1911	84,914	4,257	19.95	
		1912	1,046	143	7.31	
29	Lac Ste. Anne	1908	760	36	21.11	24.25
		1909	172	9	19.11	
		1910	. . . .	. . . . . .	. . . . .	
		1911	808	16	31.07	
		1912	360	14	25.71	
30	Pembina	1908	. . . .	. . . . . .	. . . . .	23.12
		1909	. . . .	. . . . . .	. . . . .	
		1910	1,164	46	25.30	
		1911	3,850	154	25.00	
		1912	248	13	19.07	
31	St. Albert	1908	826	51	16.19	26.38
		1909	3,453	150	23.00	
		1910	5,359	182	29.45	
		1911	17,629	659	26.75	
		1912	7,715	211	36.51	
32	Sturgeon	1908	4,631	148	31.29	22.51
		1909	2,847	146	19.50	
		1910	12,070	502	24.04	
		1911	26,175	990	26.45	
		1912	398	35	11.31	
33	Victoria.	1908	955	34	28.08	23.17
		1909	1,565	83	18.85	
		1910	13,475	595	22.65	
		1911	40,218	1,418	28.38	
		1912	5,582	312	17.89	

WINTER WHEAT—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
34	Pakan	1908	....	......	.....	13.49
		1909	....	......	.....	
		1910	2,742	130	21.09	
		1911	2,529	176	14.37	
		1912	1,334	266	5.01	
35	Athabasca	1908	....	......	.....	33.14
		1909	....	......	.....	
		1910	856	33	25.94	
		1911	32	2	26.00	
		1912	3,177	69	47.49	
36	Peace River	1908	....	......	.....	25.68
		1909	....	......	.....	
		1910	....	......	.....	
		1911	2,818	127	22.19	
		1912	3,443	118	29.17	
	Indian Reserves	1912	14,590	906	16.10	16.10

OATS

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston	1908	364,944	10,034	36.37	38.01
		1909	708,804	17,111	41.42	
		1910	38,167	2,291	16.66	
		1911	507,836	9,753	53.07	
		1912	761,693	17,905	42.54	
2	Macleod	1908	60,292	1,903	31.68	34.93
		1909	209,087	5,360	39.01	
		1910	2,223	70	31.76	
		1911	111,063	2,594	42.85	
		1912	134,423	4,573	29.39	
3	Lethbridge	1908	323,873	10,182	31.80	31.16
		1909	536,527	17,808	30.12	
		1910	56,526	2,644	21.37	
		1911	1,010,669	23,804	42.46	
		1912	1,456,451	48,392	30.09	
4	Pincher Creek	1908	254,533	7,746	32.85	33.03
		1909	212,532	5,222	40.69	
		1910	27,292	1,785	15.29	
		1911	197,796	5,249	37.68	
		1912	391,265	10,120	38.66	
5	Claresholm	1908	404,143	11,985	33.72	33.45
		1909	783,121	21,499	36.42	
		1910	14,330	1,424	10.06	
		1911	768,370	17,126	44.87	
		1912	929,951	22,026	42.21	

OATS—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
6	Medicine Hat	1908	60,662	4,099	14.79	26.13
		1909	378,815	9,650	39.24	
		1910	25,300	1,958	12.92	
		1911	495,422	13,416	36.93	
		1912	752,844	28,106	26.78	
7	Nanton	1908	463,009	14,140	32.74	35.91
		1909	908,742	28,091	32.34	
		1910	108,647	5,906	18.23	
		1911	1,148,908	21,832	52.62	
		1912	1,582,778	36,025	43.65	
8	High River..........	1908	1,739,964	39,322	44.24	37.53
		1909	2,663,238	67,942	39.15	
		1910	175,576	13,517	12.99	
		1911	2,342,098	45,926	50.99	
		1912	3,016,330	74,865	40.29	
9	Rocky Mountain.....	1908	1,274	60	21.23	21.23
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
10	Okotoks	1908	652,825	15,519	42.06	39.41
		1909	1,148,105	25,762	44.56	
		1910	79,742	5,230	15.25	
		1911	914,542	15,848	57.70	
		1912	977,620	26,050	37.52	
11	Cochrane	1908	115,721	2,998	28.59	32.13
		1909	430,001	9,816	44.87	
		1910	77,213	4,501	17.15	
		1911	294,110	8,385	35.07	
		1912	361,348	10,324	35.00	
12	Gleichen	1908	842,358	19,119	44.05	40.37
		1909	1,977,643	41,536	47.61	
		1910	415,800	24,298	17.11	
		1911	2,185,033	42,615	51.27	
		1912	2,999,035	71,730	41.81	
13	Didsbury .	1908	1,214,959	29,547	41.11	34.10
		1909	1,974,309	50,199	39.33	
		1910	747,948	35,779	20.90	
		1911	1,122,678	37,909	29.66	
		1912	1,920,768	48,602	39.52	
14	Olds...	1908	473,040	15,318	30.88	32.16
		1909	861,769	23,814	36.18	
		1910	293,535	14,484	20.27	
		1911	873,467	22,711	38.46	
		1912	989,370	28,251	35.01	
15	Stettler .	1908	638,303	15,318	36.79	33.85
		1909	729,909	22,972	32.10	
		1910	425,819	22,632	18.81	
		1911	956,802	22,529	42.47	
		1912	2,160,226	55,245	39.12	

OATS—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
16	Sedgewick	1908	536,623	15,922	33.70	33.24
		1909	749,583	28,206	26.57	
		1910	595,764	27,151	21.94	
		1911	1,453,396	33,257	43.70	
		1912	3,401,071	84,373	40.30	
17	Innisfail	1908	365,311	10,824	33.75	35.30
		1909	576,301	16,229	35.50	
		1910	469,135	16,805	27.92	
		1911	693,784	16,824	41.24	
		1912	574,301	15,074	38.10	
18	Red Deer	1908	350,666	9,644	36.36	33.51
		1909	392,701	12,397	31.67	
		1910	322,763	11,421	28.26	
		1911	385,448	11,103	34.72	
		1912	538,075	14,725	36.54	
19	Lacombe	1908	452,390	12,641	35.78	35.44
		1909	638,216	20,407	31.27	
		1910	872,674	27,566	31.66	
		1911	853,940	22,891	37.97	
		1912	854,801	21,090	40.53	
20	Ponoka	1908	459,679	12,069	36.28	35.97
		1909	542,273	13,026	41.62	
		1910	461,756	16,155	28.52	
		1911	714,138	19,347	36.40	
		1912	834,889	22,528	37.06	
21	Wetaskiwin	1908	579,347	14,441	40.11	34.12
		1909	876,408	26,969	32.45	
		1910	699,722	24,106	29.02	
		1911	826,391	24,531	33.69	
		1912	921,495	26,046	35.37	
22	Leduc	1908	560,383	18,026	31.08	29.99
		1909	491,777	18,596	26.45	
		1910	598,881	19,875	30.13	
		1911	653,851	19,318	33.84	
		1912	523,996	18,398	28.48	
23	Camrose	1908	1,065,212	28,208	37.76	35.29
		1909	1,345,214	43,871	30.82	
		1910	905,425	44,549	20.07	
		1911	2,242,006	48,586	46.10	
		1912	2,477,098	59,388	41.71	
24	Alexandra	1908	288,687	8,756	32.97	33.26
		1909	587,230	15,326	38.31	
		1910	317,712	14,006	22.68	
		1911	552,000	15,411	35.82	
		1912	1,039,560	28,442	36.55	
25	Vermilion	1908	256,070	8,321	30.77	32.50
		1909	693,011	19,175	36.14	
		1910	396,993	18,480	21.48	
		1911	455,330	13,326	34.16	
		1912	861,507	21,810	39.95	

OATS—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
26	Vegreville	1908	1,779,862	27,248	28.62	30.38
		1909	1,133,872	36,118	31.36	
		1910	563,020	32,589	17.28	
		1911	1,367,033	35,735	38.25	
		1912	1,661,783	45,628	36.42	
27	Strathcona	1908	515,140	13,055	39.45	38.16
		1909	680,058	20,009	33.98	
		1910	590,539	17,581	33.59	
		1911	913,599	21,043	43.41	
		1912	949,236	23,501	40.39	
28	Stony Plain	1908	304,748	9,414	32.25	30.68
		1909	441,274	13,672	32.20	
		1910	352,576	11,788	29.92	
		1911	405,696	15,992	25.37	
		1912	468,234	13,931	33.68	
29	Lac Ste. Anne	1908	23,311	860	27.10	31.56
		1909	9,644	357	27.29	
		1910	21,611	561	38.32	
		1911	31,866	1,006	31.68	
		1912	55,163	1,700	32.44	
30	Pembina	1908	46,823	1,889	24.78	28.81
		1909	80,496	2,862	28.11	
		1910	148,951	4,758	31.31	
		1911	103,470	3,296	31.39	
		1912	249,257	8,400	28.48	
31	St. Albert	1908	502,355	14,073	35.69	36.92
		1909	602,960	17,412	34.62	
		1910	647,945	16,073	40.31	
		1911	597,145	16,103	37.08	
		1912	602,203	16,280	36.92	
32	Sturgeon	1908	564,711	14,937	37.80	38.16
		1909	606,450	17,519	34.66	
		1910	884,598	25,114	35.22	
		1911	1,070,572	26,102	41.01	
		1912	1,176,028	27,920	42.12	
33	Victoria	1908	421,057	12,727	33.08	35.97
		1909	737,804	21,315	34.61	
		1910	639,811	19,619	32.61	
		1911	1,034,170	25,340	40.81	
		1912	1,030,428	26,571	38.74	
34	Pakan	1908	54,466	2,048	26.59	27.82
		1909	85,201	2,836	30.00	
		1910	174,089	6,647	26.19	
		1911	247,254	9,379	26.36	
		1912	266,751	8,900	29.97	
35	Athabasca	1908	1,777	60	29.61	37.98
		1909	28,438	649	43.81	
		1910	30,795	1,033	29.81	
		1911	24,085	702	34.31	
		1912	27,075	519	52.36	

OATS—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
36	Peace River	1908	3,998	72	55.52	40.51
		1909	4,157	167	24.89	
		1910	5,552	190	29.22	
		1911	51,061	838	60.93	
		1912	89,320	2,788	32.03	
	Indian Reserves	1912	48,861	1,743	28.03	28.03

BARLEY

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston	1908	26,925	984	27.36	27.13
		1909	18,610	631	29.49	
		1910	1,594	149	10.70	
		1911	17,134	434	39.48	
		1912	76,822	2,690	28.63	
2	Macleod	1908	2,722	80	34.02	27.99
		1909	4,674	208	22.46	
		1910	214	14	15.29	
		1911	2,033	44	46.20	
		1912	19,324	878	22.00	
3	Lethbridge	1908	40,917	1,704	24.01	25.92
		1909	16,308	674	25.20	
		1910	1,082	48	22.54	
		1911	9,971	282	35.36	
		1912	168,059	7,459	22.53	
4	Pincher Creek	1908	4,707	195	24.13	26.44
		1909	17,257	402	42.92	
		1910	106	13	8.15	
		1911	2,442	83	28.74	
		1912	36,881	1,303	28.30	
5	Claresholm	1908	20,382	915	22.27	22.86
		1909	26,710	1,086	24.58	
		1910	74	5	14.80	
		1911	9,014	308	29.27	
		1912	100,195	4,278	23.42	
6	Medicine Hat	1908	3,800	459	8.27	22.70
		1909	37,767	1,115	33.85	
		1910	1,584	147	10.71	
		1911	30,142	745	40.45	
		1912	128,242	6,332	20.25	
7	Nanton	1908	25,354	1,191	21.28	24.37
		1909	11,713	491	23.85	
		1910	40	4	10.00	
		1911	7,809	208	37.36	
		1912	59,484	2,025	29.37	

BARLEY—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
8	High River	1908	87,323	3,738	23.36	24.86
		1909	92,268	3,350	27.51	
		1910	2,424	544	4.46	
		1911	74,219	1,883	39.42	
		1912	357,383	12,094	29.55	
9	Rocky Mountain	1908	36	2	.18	18.00
		1909	....	......	....	
		1910	....	......	....	
		1911	....	......	.....	
		1912	....	......	.....	
10	Okotoks	1908	100,836	3,284	30.70	26.69
		1909	121,253	3,997	30.36	
		1910	5,245	576	9.11	
		1911	77,173	2,106	36.63	
		1912	177,902	6,665	26.69	
11	Cochrane	1908	26,163	1,158	22.59	19.69
		1909	75,590	2,361	32.01	
		1910	5,135	656	7.83	
		1911	18,232	2,199	8.25	
		1912	135,828	4,887	27.79	
12	Gleichen	1908	69,641	2,572	27.07	25.09
		1909	129,349	4,759	27.14	
		1910	29,387	3,776	7.78	
		1911	243,822	6,758	36.08	
		1912	644,275	23,496	27.42	
13	Didsbury	1908	194,312	7,210	26.95	23.56
		1909	270,852	10,070	26.89	
		1910	90,396	5,963	15.16	
		1911	95,487	4,371	21.84	
		1912	340,393	12,616	26.98	
14	Olds	1908	52,353	2,593	20.19	24.00
		1909	114,659	3,879	29.55	
		1910	43,814	2,488	17.61	
		1911	97,683	3,468	25.25	
		1912	168,318	6,136	27.43	
15	Stettler	1908	65,054	2,459	26.45	24.86
		1909	61,635	2,515	24.50	
		1910	33,026	2,369	13.98	
		1911	41,754	1,328	31.44	
		1912	279,541	10,005	27.94	
16	Sedgewick	1908	28,358	1,645	17.23	21.60
		1909	40,810	1,980	20.61	
		1910	41,622	2,536	16.41	
		1911	88,023	2,960	29.40	
		1912	578,080	19,595	24.39	
17	Innisfail	1908	74,126	2,974	24.92	26.72
		1909	92,235	3,672	25.11	
		1910	86,434	3,756	23.01	
		1911	108,114	3,307	32.69	
		1912	89,379	3,204	27.89	

BARLEY—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
18	Red Deer	1908	50,453	2,057	24.52	25.82
		1909	78,894	2,992	23.37	
		1910	65,427	2,944	22.22	
		1911	78,778	2,632	29.93	
		1912	136,308	4,690	29.06	
19	Lacombe............	1908	73,233	2,948	24.84	26.48
		1909	81,736	3,901	20.95	
		1910	141,980	5,712	24.86	
		1911	143,863	4,503	31.94	
		1912	235,530	7,927	29.83	
20	Ponoka	1908	70,069	2,753	25.45	28.18
		1909	83,400	2,536	32.92	
		1910	100,462	4,438	22.64	
		1911	164,786	5,597	29.44	
		1912	213,436	7,006	30.46	
21	Wetaskiwin	1908	52,064	2,110	24.67	24.68
		1909	65,949	3,382	19.50	
		1910	88,329	3,958	22.32	
		1911	87,296	3,312	26.36	
		1912	133,656	4,372	30.57	
22	Leduc	1908	66,440	3,466	19.16	24.33
		1909	81,947	3,658	23.40	
		1910	102,406	4,052	25.27	
		1911	118,571	3,961	29.93	
		1912	125,182	5,229	23.93	
23	Camrose	1908	109,604	4,183	26.20	25.46
		1909	123,725	5,458	22.66	
		1910	80,311	5,112	15.71	
		1911	181,504	5,853	31.01	
		1912	277,761	8,756	31.72	
24	Alexandra...........	1908	33,606	1,538	21.85	23.77
		1909	43,714	1,793	24.38	
		1910	22,878	1,298	17.63	
		1911	46,493	1,613	28.20	
		1912	155,711	5,811	26.79	
25	Vermilion	1908	22,370	1,111	20.13	23.13
		1909	70,678	2,760	25.00	
		1910	44,365	2,653	16.72	
		1911	60,808	2,493	24.37	
		1912	148,496	5,044	29.44	
26	Vegreville	1908	92,954	3,993	23.27	23.47
		1909	151,299	6,251	24.20	
		1910	82,250	5,897	13.94	
		1911	169,530	6,212	27.29	
		1912	214,720	7,494	28.65	
27	Strathcona	1908	96,952	3,684	26.31	30.18
		1909	162,259	5,912	27.61	
		1910	164,212	5,611	29.26	
		1911	217,516	6,555	37.18	
		1912	261,723	8,561	30.55	

BARLEY—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
28	Stony Plain	1908	85,671	2,820	30.37	26.72
		1909	117,817	4,405	26.21	
		1910	96,610	4,222	22.88	
		1911	180,473	6,384	28.27	
		1912	191,690	7,402	25.89	
29	Lac Ste. Anne	1908	7,083	401	17.66	23.77
		1909	1,496	136	11.00	
		1910	6,293	187	33.65	
		1911	5,004	191	31.43	
		1912	10,562	420	25.14	
30	Pembina	1908	10,946	455	24.05	23.53
		1909	18,494	886	20.87	
		1910	26,926	1,083	24.86	
		1911	16,133	683	23.62	
		1912	46,339	1,907	24.29	
31	St. Albert	1908	82,588	2,303	35.86	29.07
		1909	124,499	5,167	24.09	
		1910	87,550	2,916	30.02	
		1911	89,421	3,172	28.19	
		1912	125,521	4,616	27.19	
32	Sturgeon	1908	117,540	4,212	27.90	28.24
		1909	147,560	5,342	27.62	
		1910	186,538	6,680	27.93	
		1911	196,896	7,090	27.27	
		1912	227,068	7,445	30.49	
33	Victoria	1908	110,894	6,348	17.46	23.73
		1909	204,984	10,512	19.52	
		1910	194,514	8,565	22.71	
		1911	286,543	9,397	30.49	
		1912	325,738	11,425	28.51	
34	Pakan	1908	16,316	678	24.06	22.20
		1909	25,124	1,115	22.53	
		1910	43,444	2,059	21.09	
		1911	61,382	2,876	21.34	
		1912	61,404	2,791	22.00	
35	Athabasca	1908	460	15	30.66	31.74
		1909	4,511	178	25.33	
		1910	2,625	106	24.76	
		1911	2,717	106	25.63	
		1912	2,616	50	52.32	
36	Peace River	1908	5,569	130	42.83	31.74
		1909	5,546	227	24.43	
		1910	10,232	364	28.11	
		1911	6,818	188	36.26	
		1912	6,614	244	27.10	
	Indian Reserves	1912	3,531	202	17.58	17.58

No. 2.—CARLOAD OF ALBERTA RANGE STEERS.

Owned and shipped by George Lane, Calgary, to Chicago, where on October 14, 1912, the tops brought $10.25 per cwt.—the highest price ever paid for cattle off the range.

FLAX

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston	1908	3,358	246	15.68	12.51
		1909	1,780	147	12.11	
		1910	....	......	.....	
		1911	8,740	867	10.08	
		1912	55,256	4,540	12.17	
2	Macleod	1908	....	......	.....	15.18
		1909	165	33	5.00	
		1910	....	......	.....	
		1911	2,080	81	25.68	
		1912	8,492	571	14.87	
3	Lethbridge	1908	10,064	1,475	6.82	7.82
		1909	17,166	1,637	10.48	
		1910	22	34	.65	
		1911	29,992	2,937	10.21	
		1912	208,351	19,044	10.94	
4	Pincher Creek	1908	....	......	.....	12.31
		1909	281	28	10.03	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	657	45	14.60	
5	Claresholm	1908	3,714	436	8.51	11.96
		1909	1,467	121	12.13	
		1910	....	......	.....	
		1911	24,074	2,462	9.76	
		1912	62,535	3,587	17.43	
6	Medicine Hat	1908	3,127	532	5.87	7.86
		1909	1,823	174	10.47	
		1910	393	113	3.48	
		1911	20,634	1,916	10.76	
		1912	302,466	34,726	8.71	
7	Nanton	1908	6,761	858	7.88	9.89
		1909	2.660	454	5.85	
		1910	....	......	.....	
		1911	712	46	15.49	
		1912	12,783	1,236	10.34	
8	High River	1908	9,039	1,237	7.30	9.42
		1909	911	87	10.47	
		1910	....	......	.....	
		1911	533	58	9.19	
		1912	9,777	911	10.73	
9	Rocky Mountain	1908	....	......	.....	.....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
10	Okotoks	1908	1,269	104	12.00	14.47
		1909	8,089	420	19.25	
		1910	769	95	8.09	
		1911	260	20	13.00	
		1912	6,652	332	20.03	

FLAX—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
11	Cochrane	1908	378	41	9.21	10.94
		1909	4,958	206	24.06	
		1910	873	211	4.14	
		1911	837	273	3.06	
		1912	2,751	193	14.25	
12	Gleichen	1908	6,946	555	12.51	9.54
		1909	51,822	4,498	11.52	
		1910	12,754	4,174	3.06	
		1911	20,676	2,068	9.99	
		1912	135,120	12,713	10.62	
13	Didsbury	1908	2,314	342	6.76	7.95
		1909	4,305	306	14.06	
		1910	3,217	1,258	2.57	
		1911	628	111	5.66	
		1912	21,354	1,704	10.71	
14	Olds	1908	385	45	8.55	9.78
		1909	1,151	102	11.28	
		1910	1,703	244	6.98	
		1911	572	54	10.59	
		1912	5,761	500	11.52	
15	Stettler	1908	8,261	1,019	8.10	7.82
		1909	10,452	1,282	8.15	
		1910	10,409	2,405	4.33	
		1911	12,827	1,643	7.81	
		1912	80,654	7,530	10.71	
16	Sedgewick	1908	7,761	1,163	6.67	7.12
		1909	11,069	1,648	6.71	
		1910	10,369	2,761	3.76	
		1911	12,596	1,706	7.38	
		1912	196,987	17,762	11.09	
17	Innisfail	1908	13	3	4.33	8.03
		1909	75	7	10.71	
		1910	120	13	9.23	
		1911	....	......	.....	
		1912	1,595	203	7.85	
18	Red Deer	1908	246	11	22.36	14.43
		1909	165	13	12.69	
		1910	397	176	2.26	
		1911	1,375	55	25.00	
		1912	325	33	9.85	
19	Lacombe	1908	175	10	17.50	12.41
		1909	246	16	15.38	
		1910	334	37	9.03	
		1911	2,221	261	8.50	
		1912	35	3	11.66	
20	Ponoka	1908	121	14	8.64	11.26
		1909	314	29	10.83	
		1910	....	......	.....	
		1911	84	61	14.00	
		1912	6,030	520	11.59	

FLAX—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
21	Wetaskiwin	1908	12	1	12.00	9.24
		1909	229	13	17.21	
		1910	143	22	6.50	
		1911	39	13	3.00	
		1912	45	6	7.50	
22	Leduc	1908	....	......	.....	25.90
		1909	367	15	24.46	
		1910	111	7	15.86	
		1911	....	......	.....	
		1912	187	5	37.40	
23	Camrose	1908	1,698	149	11.39	8.95
		1909	3,027	317	9.54	
		1910	2,107	445	4.51	
		1911	2,637	328	8.04	
		1912	10,232	905	11.30	
24	Alexandra	1908	1,914	171	11.19	9.27
		1909	7,241	750	9.65	
		1910	8,513	1,444	5.89	
		1911	9,503	1,228	7.74	
		1912	61,455	5,159	11.91	
25	Vermilion	1908	301	47	6.40	8.22
		1909	1,294	139	9.30	
		1910	2,002	686	2.92	
		1911	1,558	156	10.18	
		1912	4,660	378	12.32	
26	Vegreville	1908	1,091	88	12.39	11.66
		1909	210	12	17.50	
		1910	580	121	4.79	
		1911	....	......	.....	
		1912	1,462	122	11.98	
27	Strathcona	1908	....	......	.....	12.47
		1909	232	19	12.21	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	280	22	12.73	
28	Stony Plain	1908	50	4	12.50	21.14
		1909	32	1	32.00	
		1910	14	1	14.00	
		1911	....	......	.....	
		1912	443	17	26.06	
29	Lac Ste. Anne	1908	....	......	.....	.....
		1909	....	......	.....	
		1910	....	......	....	
		1911	....	......	.....	
		1912	....	......	.....	
30	Pembina	1908	....	......	.....	....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	

FLAX—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
31	St. Albert	1908	25	3	8.33	8.33
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
32	Sturgeon	1908	....	......	.....	12.00
		1909	....	......	.....	
		1910	144	12	12.00	
		1911	....	......	.....	
		1912	....	......	.....	
33	Victoria	1908	10	1	10.00	11.83
		1909	77	5	15.40	
		1910	81	12	6.75	
		1911	1,300	260	5.00	
		1912	22	1	22.00	
34	Pakan	1908	76	4	19.00	19.00
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
35	Athabasca	1908	....	......	.....	.....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
36	Peace River	....	47	8	5.87	5.87

SPELTZ

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston	1908	356	31	11.48	21.26
		1909	214	12	17.83	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	724	21	34.47	
2	Macleod	1908	....	......	.....	.....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
3	Lethbridge	1908	670	44	15.22	17.15
		1909	109	5	20.80	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	4,581	290	15.45	

SPELTZ—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
4	Pincher Creek	1908	34	1	34.00	43.56
		1909	569	12	46.75	
		1910	....	......	.....	
		1911	949	19	49.95	
		1912	....	......	.....	
5	Claresholm	1908	2,798	160	17.48	18.08
		1909	836	44	19.00	
		1910	....	......	.....	
		1911	656	37	17.76	
		1912	....	......	.....	
6	Medicine Hat	1908	10	3	3.33	18.47
		1909	933	29	32.16	
		1910	....	......	.....	
		1911	625	27	23.15	
		1912	1,647	108	15.25	
7	Nanton	1908	....	......	.....	.....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
8	High River..........	1908	....	......	.....	.....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
9	Rocky Mountain.....	1908	....	......	.....	.....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
10	Okotoks	1908	....	.....	.....	.....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
11	Cochrane	1908	....	......	.....	20.00
		1909	420	21	20.00	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
12	Gleichen	1908	2,513	69	36.42	23.74
		1909	....	......	.....	
		1910	38	3	12.66	
		1911	....	......	.....	
		1912	1,064	48	22.16	
13	Didsbury	1908	564	38	14.84	19.43
		1909	718	22	32.63	
		1910	94	12	7.83	
		1911	....	......	.....	
		1912	157	7	22.43	

SPELTZ—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
14	Olds	1908	514	22	24.59	14.63
		1909	162	10	16.20	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	25	8	3.12	
15	Stettler	1908	163	3	54.32	29.31
		1909	761	39	19.33	
		1910	....	......	.....	
		1911	1,992	70	28.46	
		1912	999	66	15.13	
16	Sedgewick	1908	356	32	11.12	17.90
		1909	738	28	26.35	
		1910	26	2	13.00	
		1911	....	......	.....	
		1912	1,200	59	20.34	
17	Innisfail	1908	....	......	.....	...
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
18	Red Deer	1908	....	......	.....	...
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
19	Lacombe	1908	....	......	.....	.....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
20	Ponoka	1908	....	......	.....	.....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
21	Wetaskiwin	1908	96	2	48.00	25.84
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	554	150	3.69	
22	Leduc	1908	224	7	32.00	25.16
		1909	55	3	18.33	
		1910	....	.....	.....	
		1911	....	.....	.....	
		1912	....	.....	.....	
23	Camrose	1908	....	......	.....	21.96
		1909	....	......	.....	
		1910	....	......	.....	
		1911	988	45	21.96	
		1912	....	......	.....	

SPELTZ—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
24	Alexandra	1908	....	......	.....	34.05
		1909	....	......	.....	
		1910	....	......	.....	
		1911	127	5	25.40	
		1912	299	7	42.71	
25	Vermilion	1908	129	7	18.42	22.78
		1909	150	7	21.42	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	228	8	28.50	
26	Vegreville	1908	360	10	36.00	27.03
		1909	542	30	18.06	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
27	Strathcona	1908	....	......	.....	.....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
28	Stony Plain	1908	....	......	.....	.....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
29	Lac Ste. Anne	1908	26	1	26.00	26.00
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
30	Pembina	1908	....	......	.....	.....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
31	St. Albert	1908	....	......	.....	.....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
32	Sturgeon	1908	....	......	.....	.....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
33	Victoria	1908	....	......	.....	24.29
		1909	170	7	24.29	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	

SPELTZ—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
34	Pakan	1908	15	1	15.00	20.00
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	50	2	25.00	
35	Athabasca	1908	....	......	.....	....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	

RYE

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston	1908	....	......	.....	21.16
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	127	6	21.16	
2	Macleod	1908	....	......	.....	.....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
3	Lethbridge	1908	345	28	12.32	17.31
		1909	77	14	5.60	
		1910	....	......	.....	
		1911	1,157	34	34.02	
		1912	....	......	.....	
4	Pincher Creek	1908	....	......	.....	.....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
5	Claresholm	1908	....	......	.....	21.00
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	63	3	21.00	
6	Medicine Hat	1908	....	......	.....	16.65
		1909	....	......	.....	
		1910	....	......	.....	
		1911	132	10	13.2	
		1912	181	9	20.11	

RYE—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
7	Nanton	1908	......	....	.....	.....
		1909	......	......	.....	
		1910	......	......	.....	
		1911	......	......	.....	
		1912	......	......	.....	
8	High River..........	1908	......	.....	.....	30.39
		1909	......	.....	.....	
		1910	......	.....	.....	
		1911	......	.....	.....	
		1912	851	28	30.39	
9	Rocky Mountain....	1908	......	......	.....	.....
		1909	......	......	.....	
		1910	......	......	.....	
		1911	......	......	.....	
		1912	......	......	.....	
10	Okotoks	1908	669	33	20.27	19.72
		1909	924	56	16.50	
		1910	......	......	.....	
		1911	......	......	.....	
		1912	896	40	22.40	
11	Cochrane	1908	100	5	20.00	17.30
		1909	1,369	47	27.01	
		1910	142	29	4.90	
		1911	......	......	.....	
		1912	......	......	.....	
12	Gleichen	1908	......	......	.....	36.30
		1909	......	......	.....	
		1910	......	......	.....	
		1911	......	......	.....	
		1912	726	20	36.30	
13	Didsbury	1908	881	48	19.19	18.48
		1909	1,692	69	24.51	
		1910	2,042	156	13.09	
		1911	9,661	839	11.51	
		1912	29,717	1,232	24.12	
14	Olds...............	1908	92	6	15.33	21.19
		1909	411	23	17.87	
		1910	677	23	29.43	
		1911	124	6	20.67	
		1912	3,948	174	22.69	
15	Stettler	1908	......	......	.....	19.95
		1909	179	13	13.76	
		1910	113	7	16.14	
		1911	202	6	33.67	
		1912	130	8	16.25	
16	Sedgewick...........	1908	23	1	23.00	17.93
		1909	144	14	10.27	
		1910	110	7	15.71	
		1911	152	6	25.33	
		1912	1,167	76	15.35	

RYE—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
17	Innisfail	1908	1,190	38	31.31	23.53
		1909	976	53	18.41	
		1910	752	66	11.39	
		1911	1,051	37	28.40	
		1912	338	12	28.16	
18	Red Deer	1908	1,863	126	14.78	17.89
		1909	1,023	35	29.20	
		1910	1,132	114	9.93	
		1911	1,944	93	20.91	
		1912	836	57	14.66	
19	Lacombe............	1908	2,276	120	18.96	21.13
		1909	3,328	246	14.00	
		1910	4,887	190	25.72	
		1911	4,478	183	24.47	
		1912	2,456	109	22.53	
20	Ponoka	1908	10,620	626	16.96	18.36
		1909	10,379	742	13.98	
		1910	13,887	630	22.04	
		1911	13,594	622	21.85	
		1912	10,208	600	17.01	
21	Wetaskiwin	1908	272	12	22.66	22.48
		1909	2,403	118	20.36	
		1910	616	33	18.67	
		1911	1,969	67	29.89	
		1912	1,333	64	20.82	
22	Leduc	1908	72	4	18.00	12.00
		1909	....	......	.....	
		1910	....	......	.....	
		1911	36	6	6.00	
		1912	....	......	.....	
23	Camrose	1908	898	46	19.52	18.74
		1909	1,317	77	17.10	
		1910	1,233	79	15.61	
		1911	1,850	91	20.33	
		1912	1,142	54	21.15	
24	Alexandra	1908	....	......	.....	14.12
		1909	224	11	20.36	
		1910	....	......	.....	
		1911	875	111	7.88	
		1912	....	......	.....	
25	Vermilion	1908	24	1	24.00	20.96
		1909	....	......	.....	
		1910	....	......	.....	
		1911	663	37	17.92	
		1912	....	......	.....	
26	Vegreville	1908	927	56	16.55	17.56
		1909	212	8	26.50	
		1910	453	47	9.63	
		1911	....	......	.....	
		1912	....	......	.....	

RYE—*Continued*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
27	Strathcona	1908	....	......	.....	.....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
28	Stony Plain	1908	....	......	.....	13.60
		1909	68	5	13.60	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
29	Lac Ste. Anne	1908	....	......	.....	.....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
30	Pembina	1908	....	......	.....	....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	....	
31	St. Albert	1908	....	......	.....	....
		1909	....	......	....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
32	Sturgeon	1908	132	8	16.50	19.62
		1909	....	......	.....	
		1910	341	15	22.75	
		1911	....	......	.....	
		1912	....	......	.....	
33	Victoria	1908	453	21	21.57	17.38
		1909	711	45	15.80	
		1910	503	34	14.79	
		1911	....	......	.....	
		1912	....	......	.....	
34	Pakan	1908	84	3	28.00	17.62
		1909	364	16	22.75	
		1910	972	58	16.76	
		1911	556	27	20.59	
		1912	....	......	.....	
35	Athabasca	1908	....	......	.....	.....
		1909	....	......	.....	
		1910	....	......	.....	
		1911	....	......	.....	
		1912	....	......	.....	
36	Peace River	1908	....	......	.....	15.60
		1909	....	......	.....	
		1910	....	......	.....	
		1911	78	5	15.60	
		1912	...	......	.....	

SUMMARY OF THE ACREAGE AND YIELDS OF THE LEADING GRAINS DURING THE LAST TWELVE YEARS

	YEAR	Crop area in acres	Total yields in bushels	Average yield per acre	Average yield
Spring Wheat	1912	957,874	17,434,774	18.20	19.25
	1911	757,493	15,730,238	20.75	
	1910	450,493	5,697,956	12.85	
	1909	324,472	6,155,455	18.97	
	1908	212,677	4,001,504	18.81	
	1907	123,935	2,261,610	18.25	
	1906	115,502	2,664,661	23.07	
	1905	75,353	1,617,505	21.46	
	1904	47,411	786,075	16.58	
	1903	59,951	1,118,180	18.65	
	1902	45,064	850,122	18.86	
	1901	34,890	857,714	24.58	
Winter Wheat	1912	120,811	2,395,875	19.83	21.66
	1911	182,671	4,336,749	23.74	
	1910	142,467	2,206,564	15.48	
	1909	102,167	2,312,344	22.63	
	1908	104,956	3,093,422	29.47	
	1907	83,965	1,932,925	20.66	
	1906	61,625	1,301,359	21.11	
	1905	32,174	689,019	21.41	
	1904	8,296	152,125	18.33	
	1903	3,440	82,418	23.95	
Oats	1912	971,969	37,085,234	38.15	35.04
	1911	669,827	27,604,993	41.21	
	1910	492,589	12,158,530	24.68	
	1909	693,901	24,819,661	35.76	
	1908	431,145	15,922,974	36.93	
	1907	307,093	9,247,914	30.11	
	1906	335,728	13,136,913	39.12	
	1905	242,801	9,514,180	39.18	
	1904	180,698	5,609,496	31.04	
	1903	162,314	5,187,511	31.95	
	1902	118,997	3,776,976	31.74	
	1901	104,533	4,253,284	40.68	
Barley	1912	225,055	6,287,112	27.94	26.34
	1911	103,302	3,037,584	29.41	
	1910	90,901	1,889,509	20.79	
	1909	107,764	3,310,332	30.72	
	1908	77,876	1,949,164	25.03	
	1907	54,698	1,082,460	19.78	
	1906	73,588	2,157,957	29.32	
	1905	64,830	1,773,914	27.36	
	1904	61,549	1,608,241	26.12	
	1903	42,219	1,077,274	25.51	
	1902	22,201	473,108	21.31	
	1901	13,483	442,381	32.81	

SUMMARY OF THE ACREAGE AND YIELDS OF THE LEADING GRAINS DURING THE LAST TWELVE YEARS.---*Continued*

	YEAR	Crop area in acres	Total yields in bushels	Average yield per acre	Average yield
Flax	1912	112,776	1,196,416	10.60	9.93
	1911	16,549	153,908	9.30	
	1910	15,271	46,155	3.02	
	1909	12,479	131,531	10.54	
	1908	9,262	73,762	7.96	
	1907	6,488	50,002	7.87	
	1906	3,647	38,491	10.65	
	1905	581	8,337	14.34	
	1904	367	5,003	13.63	
	1903	830	7,753	9.34	
	1902	373	4,476	12.00	
Rye	1912	2,493	54,119	21.70	18.56
	1911	2,190	38,722	17.68	
	1910	1,522	28,306	18.60	
	1909	1,592	25,801	16.20	
	1908	1,250	22,625	18.10	
	1907	591	10,595	17.91	
	1906	1,139	22,462	19.70	
Speltz	1912	774	11,528	14.89	21.37
	1911	203	5,337	26.29	
	1910	18	164	9.11	
	1909	269	6,369	23.67	
	1908	484	9,697	20.03	
	1907	151	3,346	22.15	
	1906	385	11,423	29.67	
	1905	178	4,419	24.82	
	1904	112	2,426	21.66	

	Total crop area	Total yield of grain
1912	2,391,752	64,465,058
1911	1,732,648	50,907,531
1910	1,193,261	22,027,184
1909	1,242,644	36,761,493
1908	837,641	25,073,147
1907	576,821	14,588,852
1906	591,614	19,333,266
1905	415,917	13,607,374
1904	298,433	8,163,366

III.—VITAL STATISTICS

The work of gathering and recording the births, marriages and deaths is becoming heavier each year and at the same time much more difficult. It takes time for the new comer to become acquainted with the law regarding these things. The difficulty of securing accurate figures of the events is the greatest trouble which may occur for the department, but neglect to register a child's birth may cause him great inconvenience in after years, and the neglect to register a death may hold up the settlement of an estate for a long period or keep a widow from rceiving life insurance badly needed.

The new settler and the foreigner are not greatest offenders. The department has to state with reluctance that some of the busy physicians fail to report events as promptly as they should and frequently not at all. In the case of births the Act requires registration within a month, yet, because of the above conditions, allows registration within two years. This makes it impossible to give the final figures for any one year at the close of the year.

New Appointments. During the year the usual number of resignations and appointments of registrars has taken place, with the result that the total number of registrars shows a slight increase over those of the preceding year.

BIRTHS

The total number of births recorded during the year was 9100, a slight increase over that of the previous year, which was 8813.

MARRIAGES

During the year 4410 marriages were solemnized as against 3630 for the previous year and 3086 for 1910. The mean marriage age for females for the year was 23.98 as against 23.84 for last year and of males 28.25 as against 28.46 the previous year. The records show that twenty-five brides were married under the age of sixteen and three over sixty years old, while no less than eleven bridegrooms were over sixty.

DEATHS

The death registrations received for the year numbered 4223 as against 3618 for 1911. Attention is again called to the serious infant mortality—1312 deaths being recorded under one year, which is equal to fifteen per cent of the births.

TOTAL REGISTRATIONS received of all Births, Marriages and Deaths for each respective month of the year 1912.

MONTH	BIRTHS	MARRIAGES	DEATHS
January	874	251	314
February	840	418	278
March	926	233	399
April	822	340	360
May	887	329	320
June	868	476	323
July	791	395	429
August	904	368	498
September	898	392	386
October	854	411	338
November	799	412	298
December	821	404	289
Totals	10,284	4,429	4,232

VITAL STATISTICS RETURNS, 1905 to 1912 (Inclusive)

YEAR	BIRTHS	MARRIAGES	DEATHS	TOTAL
1905	421	187	114	722
1906	3,033	927	1,091	5,051
1907	4,732	1,907	1,578	8,217
1908	5,973	2,032	2,188	10,193
1909	6,897	2,384	2,662	11,943
1910	8 231	3,086	3,526	14,843
1911	8,813	3,630	3,618	16,061
1912	10,284	4,429	4,232	18,945
Total	48,384	18,582	19,009	85,975

REGISTRATIONS received from Registrars throughout the respective Electoral Districts, 1912

Births by Electoral Districts

ELECTORAL DISTRICTS	MALE	FEMALE	TOTAL
Alexandra	117	93	210
Athabasca	56	60	116
Camrose	127	145	272
Cardston	76	67	142
Claresholm	78	79	157
Cochrane	39	37	76
Didsbury	75	77	152
Gleichen	99	81	180
High River	50	57	107
Innisfail	48	51	99
Lacombe	16	11	27
Lac Ste. Anne	48	45	93
Leduc	89	72	161
Lethbridge	231	173	404
Macleod	40	43	83
Medicine Hat	315	283	598
Nanton	65	53	118
Okotoks	22	18	40
Olds	83	66	149
Pakan	239	257	496
Peace River	18	31	49
Pembina	32	24	56
Pincher Creek	47	46	93
Ponoka	27	30	57
Red Deer	89	76	165
Rocky Mountain	120	144	264
Sedgewick	198	193	391
St. Albert	121	92	213
Stettler	215	189	404
Stony Plain	54	59	113
Strathcona	138	123	261
Sturgeon	117	96	213
Vermilion	180	157	337
Vegreville	256	255	511
Victoria	122	121	243
Wetaskiwin	64	52	116
Calgary City	977	845	1,822
Edmonton City	513	504	1,017
Lethbridge City	149	129	278
Totals	5,350	4,934	10,284

CAUSE OF DEATH	AGES									SEX		NATIVITY														MONTHS												Total
	Under 1	1 to 4	5 to 14	15 to 24	25 to 44	45 to 59	60 to 69	70 and over	Not Specified	Male	Female	Canada	United States	Scotland	Ireland	England	France	Germany	Sweden	Norway	Austria	Russia	Galicia	Others	Unknown	January	February	March	April	May	June	July	August	September	October	November	December	
I.—GENERAL DISEASES	2	7	13	73	98	8	2	1	3	155	52	60	33	16	5	36	1		7	9	11	13		9	7	8	11	8	5	8	22	10	32	39	29	20	15	207
1. Typhoid Fever		1								1		1																							1			1
2. Typhus Fever											1	1																	1									1
3. Relapsing Fever																																						
4. Malaria																																						
4a. Including Malarial Cachexia																																						
5. Smallpox	15	19	7	3	2					22	24	37	3	1		3						1	1			2	8	11	5	3	4	6	2	1	2		2	46
6. Measles	6	35	28	5	2					41	35	50	10	1	1	11				2					1	2	3	8	10	18	18	5	2	4	1	2	3	76
7. Scarlet Fever	28	13								22	19	38				2				1						2		3	3	1	3	6	11	4	4	2	2	41
8. Whooping Cough	9	30	48	1	4	3				58	37	74	8	4		5		1						2	1	6	9	9	14	3	3	16	9	12	5	5	4	95
9. Diphtheria and Croup	1	2	2							2	3	5																3										5
9a. Including Croup	8	1	1		5	1				8	8	13	2	1												3	2	4	1						1		5	16
10. Influenza																																						
11. Miliary Fever	1									1		1																				1						1
12. Asiatic Cholera	3	1								3	1	4																					4					4
13. Cholera Nostras	17	8			1		1	1		19	9	21	3	2	1					1										1	1	1	16	3	3			28
14. Dysentery																																						
15. Plague																																						
16. Yellow Fever																																						
17. Leprosy	2	1			2	1	1			5	2	5		1	1												1	1	1	1	1			1			1	7
18. Erysipelas	2	3		1				1		6	1	6									1						1	2		1	1	1			1			7
19. Other Epidemic Diseases	6	1	1	5	9	5	1	1		19	10	16	6	2		1					2	1		1		1	4	5	4	1	1		1	3	4	1	1	29
20. Purulent Infection and Septicemia																																						
21. Glanders						1					1		1														1											1
22. Anthrax																																						
23. Rabies																																						
24. Tetanus						1				1															1		1											1
25. Mycoses																																						
26. Pellagra																																						
27. Beriberi																																						
28. Tuberculosis of the Lungs	4	11	15	52	89	25	6	1		108	95	100	35	6	4	18		1	8	9	11	6	2	1	1	17	12	16	18	23	20	17	18	13	10	12	27	203
29. Acute Miliary Tuberculosis				1						5	1	2	3			1											1	1	1	1							2	6
30. Tuberculosis Meningitis		7	3	2					1	7	6	9	3								1						2		2		2	2		1	3	1		13
31. Abdominal Tuberculosis	1		2	3	3	2	1			7	5	7	1	2						1					1	1		2	1	1		1	3	1	1		1	12
32. Pott's Disease		1									1	1																			1							1
33. White Swellings				1						1			1																						1			1
34. Tuberculosis of Other Organs	1	1		1	6	2				6	5	6		1		1		1				1		1		1	3			1		2	2	1	1			11
35. Disseminated Tuberculosis			1		3	2	1			4	3	5								1	1						2			1	1						3	7
36. Rickets																																						
37. Syphilis	3	1			2					4	2	4			1										1						1	2	1	1	1			6
(a) Primary																																						
(b) Secondary																																						
(c) Tertiary																																						
(d) Hereditary	1										1	1																								1		1
(e) Period not stated	1									1		1														1												1
38a. Soft Chancre																																						
38b. Gonococus Infection						3	2	2		5	2	2				1			1	2					1			1		1	1			2		1	1	7
39. Cancer and other Malignant Tumors of the Buccal Cavity					8	19	17	8	1	40	13	19	5	3	2	6		4	5	3	1	2		2	1	6	3	8	3	5	4	5	5	1	7	2	4	53
40. Cancer and other Malignant Tumors of the Stomach, Liver		1		1	2	3	5	6		8	10	8	4	1		3			1						1	1		2		2		1	5	2	4	1		18
41. Cancer and other Malignant Tumors of the Peritonaeum, Intestines, Rectum					3	7	3				13	3	1	3		4			1		1					1	1	1	1	1	1	1	1		1		4	13
42. Cancer and other Malignant Tumors of the Female Genital Organs			1		4	4					9	3				5						1						4	1		2	1		1				9
43. Cancer and other Malignant Tumors of the Breast		1						1		1	1	1	1																				1				1	2
44. Cancer and other Malignant Tumors of the Skin		1			8	17	9	5		24	16	16	5		1	4	1		3	2	2	2		2	2	2	2	4	4	2	4	6	4		3	8	1	40
45. Cancer and other Malignant Tumors of other Organs and of Organs not Specified					1			1		1	1	1	1															1									1	2
46. Other Tumors (Tumors of the Female Genital Organs excepted)		2	2	2	3	2	1			9	3	6	2			2			1			1				2				2		2	1	2	1	1	1	12
47. Acute Articular Rheumatism				1		1	1	1		1	3	1	2							1						1		1			1						1	4
48. Chronic Rheumatism and Gout																																						
49. Scurvy		1	2	6	8	5	1	1	1	12	13	9	9	4		1					1				1	4		1	1	4	3	1	2	4	2	1	2	25
50. Diabetes	2				3	1	1			2	5	4		2	1												1		2		1	2	1					7
51. Exophthalmic Goitre						1	1			1	1					2											1							1				2
52. Addison's Disease																																						
53. Leuchaemia			1	2	4	7	2			9	7	4	6	1		2		1				1			1	1		1	6		1	2	3	1	1			16
54. Anaemia, Chlorosis	4	3	2		1	1	1		1	6	7	8	1			3								1		1	2				2	3	2	2	1			13
55. Other General Diseases				4	11	17				32		10	7	1		10					1			1	2	4	4	2	1	3	5	3	1	2	2	3	2	32
56. Alcoholism (Acute or Chronic)					1					1						1															1							1
57. Chronic Lead Poisoning		1								1		1														1												1
58. Other Chronic Occupation Poisonings																																						
59. Other Chronic Poisonings	2	3	2	4	1					11	1	5		1	1	2			1		1				1	1	1	1	3	1	1	1		1	1		1	12
II.—DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE																																						
60. Encephalitis	20	7	5	6	4	1				25	18	31	4	1	1	2		1			1	1			1	2	4	4	5	5	4	1	5	2	7		4	43
61. Simple Meningitis	7		1	2	1					7	4	10										1					1	2	1	2	2						3	11
61a. Including Cerebrospinal Fever						3	2			3	2	2	1		1				1									1	1	1	1						1	5
62. Locomotor Ataxia		3	2	1	4	6	1	1		9	9	10	6	1		1										2	1	1		2		2	2	4	2	1	1	18
63. Other Diseases of the Spinal Cord	4				13	14	17	15		33	30	16	11	8	1	12		3	3			1	1	1	6	8	1	4	3	3	7	5	5	7	9	6	5	63
64. Cerebral Hemorrhage							1	1		1	1		1			1																	1			1		2
65. Softening of the Brain	1	2	1		6	5	14	7		20	16	15	3	4	1	3		5	2	1	1		1			2	2	4	4	1	3	3	2	4	6	3	2	36
66. Paralysis without Specified Cause					3	3				6		2	1												3	1			1	2		1			1			6
67. General Paralysis of the Insane	1			3	1	1		1		3	4	2	2			1									2		1				1			1	1	2	1	7
68. Other Forms of Mental Alienation				1	3		2			4	2	1	1	1		3												1			2	1				1	1	6
69. Epilepsy				1	1						2	1	1																		1						1	2
70. Convulsions (Non-Puerperal)	70	18								58	30	85	2										1			11	8	8	9	6	8	8	10	6	5	8	1	88
71. Convulsions of Infants								1		1		1															1											1
72. Chorea																																						
73a. Hysteria																																						
73b. Neuralgia and Neuritis		1			1	1	1			2	2	2				1									1		2			1			1					4
74. Other Diseases of the Nervous System																																						
75a. Follicular Conjunctivitis																																						
75b. Trachoma					1					1						1																					1	1
76. Diseases of the Ears																																						
III.—DISEASES OF THE CIRCULATORY SYSTEM																																						
77. Pericarditis				1	1				1	3		3																2					1					3
78. Acute Endocarditis	5	1	7	5	19	12	8	8		35	30	23	16	5		8		1	3	1	2	2		2	2	7	4	5	3	3	6	8	6	4	9	4	6	65
79. Other Diseases of the Heart	6		1	4	21	20	27	12	5	53	43	31	14	5	3	18		3	4	3	3	3		2	7	8	6	13	3	7	7	4	4	15	7	9	13	96
80. Angina Pectoris					2		2	1		4	1	2	1			1									1	1		1	1					1			1	5
81. Diseases of the Arteries, Atheroma, Aneurysm, etc	1			1	2	12	7	3		17	9	11	4	1	1	2		1		1			1		4	1		1			4	5	6	2	1	4	2	26
82. Embolism and Thrombosis				1	1	1	1	1		4	1	4			1													1							1	2	1	5
83. Diseases of the Veins (Varices, Haemorrhoids, Phlebitis, etc.)					2	1					3				1	2											1		1			1						3
84. Diseases of the Lymphatic System (Lymphangitis, etc.)																																						
85. Hemorrhage, other Diseases of the Circulatory System	5			1	2	5	2	1		11	5	8		1	1	1		1	1		1	1			1	1			2	2	1	2		5	2		1	16
IV.—DISEASES OF THE RESPIRATORY SYSTEM																																						
86. Diseases of the Nasal Fossae	1										1	1														1												1
87. Diseases of the Larynx	1		5	1	1	1	1			6	4	5	1			3						1								2		1	2	1	1	1	2	10
88. Diseases of the Thyroid Body				1							1	1														1												1
89. Acute Bronchitis	17	6	1		1	1	3	1		22	8	28	1						1								2	2	6	4	3	2	1	1	4	4	1	30
90. Chronic Bronchitis	1		1		1	1	2	6		6	6	5		1		2				1	1	2						1	3	3	1	1		1		1	1	12
91. Broncho-Pneumonia	44	36	3	3	1	2	2	1		44	48	73	8	1		6		1			1	1			1	6	3	28	17	6	3	10	3	1	2	4	6	92
92. Pneumonia	57	40	12	23	46	21	13	11		136	87	136	26	6	3	24	3	2	1	2	3	5		6	6	17	12	39	46	21	5	14	11	12	14	16	16	223
93. Pleurisy		1		4	3	1	1	2		7	5	7	2	1	1					1						2	2		1					2	4	1		12
94. Pulmonary Congestion, Pulmonary Appoplexy	1				1	3		3		6	2	3		1		2				2						1	2	1			1	2			1			8
95. Gangrene of the Lung																																						
96. Asthma		2	1	3	2	6	3	1		12	6	5	1		1	1			1	2	4					2	3	2	1	3	1	1	1	3		1		18
97. Pulmonary Emphysema					1	1		1		3		1				1									1	1						1					1	3
98. Other Diseases of the Respiratory System (Tuberculosis excepted)			1			1				1	4	3	2	1		1			1								1			1	1	3						8
V.—[illegible]																																						
99a. Disease of the Teeth and Gums																																						
99b. Other Diseases of the Mouth and Annexa	1									1		1																								1		1
100. Diseases of the Pharynx	4	5	2	1	2	1				7	8	9				3				1		1		1		2			1	2	1	1	2	4		2		15
101. Diseases of the Oesophagus																																						
102. Ulcer of the Stomach	5	3		1	1					6	4	8									1				1			1				1	1	5	2			10
103. Other Diseases of the Stomach (Cancer excepted)	20	2			5	3	2	1		20	13	24	1			1			1		5				1	1	1	4	2	3	3	4	5	3	3	4		33
104. Diarrhoea and Enteritis (under two years)	220	38								150	108	243	6			5					1	2	1			2	1	3	4	5	7	58	111	50	11	4	2	258
105. Diarrhoea and Enteritis (two years and over)		15	6	1	1	3	2	2	1	16	15	16	3	2	1	6				1		1		1		2			1	2	1	1	10	8	1	2	3	31
106. Ankylostomiasis																																						
107. Intestinal Parasites																																						
108. Appendicitis and Typhlitis		[illegible]	[illegible]	[illegible]	[illegible]		[illegible]			[illegible]	17	22	17	2	3	8			2						2	6	2	1	6	5	7	5	5	3	1	5	7	56
109. Hernia, Intestinal Obstructions	[illegible]		[illegible]			[illegible]			1	[illegible]	1	15	6	2		5				1		1		1	1	1	2	3	1	1	1		8	5	5	2	3	35

81	Diseases of the Arteries, Atheroma, Aneurysm, etc	26
82	Embolism and Thrombosis	5
83	Diseases of the Veins (Varices, Haemorrhoids, Phlebitis, etc)	3
84	Diseases of the Lymphatic System (Lymphangitis, etc)	
85	Hemorrhage, other Diseases of the Circulatory System	16
IV	DISEASES OF THE RESPIRATORY SYSTEM.	
86	Diseases of the Nasal Fossae	1
87	Diseases of the Larynx	10
88	Disease of the Thyroid Body	1
89	Acute Bronchitis	30
90	Chronic Bronchitis	12
91	Broncho-Pneumonia	92
92	Pneumonia	223
93	Pleurisy	12
94	Pulmonary Congestion, Pulmonary Appoplexy	8
95	Gangrene of the Lung	
96	Asthma	18
97	Pulmonary Emphysema	3
98	Other Diseases of the Respiratory System (Tuberculosis excepted)	8
V	DISEASES OF THE DIGESTIVE SYSTEM.	
99a.	Disease of the Teeth and Gums	
99b	Other Diseases of the Mouth and Annexa	1
100	Diseases of the Pharynx	15
101	Diseases of the Oesophagus	
102	Ulcer of the Stomach	10
103	Other Diseases of the Stomach (Cancer excepted)	33
104	Diarrhoea and Enteritis (under two years).	258
105	Diarrhoea and Enteritis (two years and over)	31
106	Ankylostomiasis	
107	Intestinal Parasites	
108	Appendicitis and Typhlitis	56
109	Hernias, Intestinal Obstructions	35
110a	Diseases of the Anus and Faecal Fistulas	
110b	Other Diseases of the Intestines	11
111	Acute Yellow Atrophy of the Liver	1
112	Hydatid Tumor of the Liver	
113	Cirrhosis of the Liver	9
114	Biliary Calculi	3
115	Other Diseases of the Liver	10
116.	Diseases of the Spleen	1
117	Simple Peritonitis (Non-Puerperal)	41
118.	Other Diseases of the Digestive System (Cancer excepted)	4
VI	NON-VENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA	
119	Acute Nephritis	31
120	Bright's Disease	62
121	Chyluria	
122	Other Diseases of the Kidneys and Annexa	6
123.	Calculi of the Urinary Passages	3
124	Diseases of the Bladder	4
125	Diseases of the Urethra, Urinary Abscess, etc.	
126.	Diseases of the Prostate	5
127	Non-Venereal Diseases of the Male Genital Organs.	
128.	Uterine Hemorrhage (Non-Puerperal)	
129	Uterine Tumor (Non-Cancerous)	
130a	Metritis	
130b	Other Diseases of the Uterus	2
131	Cysts and other Tumors of the Ovary	4
132	Salpingitis and other Diseases of the Female Genital Organs	
133	Non-Puerperal Diseases of the Breast (Cancer excepted)	
VII	THE PUERPERAL STATE	
134a	Normal Labour	1
134b	Accidents of Pregnancy	15
135.	Puerperal Hemorrhage	11
136.	Other Accidents of Labour.	12
137.	Puerperal Septicemia	19
138.	Puerperal Albuminuria and Convulsions.	16
139	Puerperal Phlegmasia Alba Dolens, Embolus, Sudden Death	9
140.	Following Childbirth (not otherwise defined).	2
141.	Puerperal Diseases of the Breast	
VIII	—DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.	
142.	Gangrene	8
143.	Furuncle	1
144.	Acute Abscess	2
145a.	Trichophytosis	
145b.	Scabies	
145c	Other Diseases of the Skin and Annexa	1
IX.	—DISEASES OF THE BONES AND OF THE ORGANS OF LOCOMOTION.	
146.	Diseases of the Bones (Tuberculosis excepted)	2
147	Diseases of the Joints	2
148	Amputations	
149	Other Diseases of the Organs of Locomotion	1
X	—MALFORMATIONS	
150	Congenital Malformations (Still-births not included)	96
XI	—DISEASES OF EARLY INFANCY	
151a.	Nurslings discharged from Hospitals without Disease	50
151b.	Congenital Debility, Icterus and Sclerema.	308
152.	Other Diseases Peculiar to Early Infancy	79
153.	Lack of Care	10
XII	OLD AGE.	
154	Senility.	73
XIII	— AFFECTIONS PRODUCED BY EXTERNAL CAUSES	
155	Suicide by Poison	2
156	Suicide by Asphyxia	1
157	Suicide by Hanging or Strangulation	8
158.	Suicide by Drowning	
159.	Suicide by Firearms	10
160	Suicide by Cutting or Piercing Instruments	5
161	Suicide by Jumping from High Place.	
162	Suicide by Crushing	
163	Other Suicides	2
164	Poisoning by Food	
165a.	Venomous Bites and Stings	
165b	Other Acute Poisonings	17
166	Conflagration	12
167	Burns (Conflagration excepted)	20
168	Absorption of Deleterious Gases (Conflagration excepted)	13
169	Accidental Drowning	34
170	Traumatism by Firearms	32
171	Traumatism by Cutting or Piercing Instruments	1
172	Traumatism by Fall	18
173.	Traumatism in Mines and Quarries	8
174.	Traumatism by Machines	5
175.	Traumatism by other Crushing (Vehicles, Railroad, Landslides, etc)	55
176.	Injuries by Animals	11
177a.	Over-exertion	
177b.	Starvation	3
178.	Excessive Cold	7
179.	Effects of Heat	
180.	Lightning	2
181.	Electricity (Lightning excepted)	2
182.	Homicide by Firearms	1
183.	Homicide by Cutting or Piercing Instruments	3
184	Homicide by Other Means	1
185a.	Dislocations	2
185b.	Sprains	
185c.	Fractures (Cause not Specified)	45
186.	Other External Violence	36
XIV	ILL-DEFINED DISEASES	
187.	Ill-Defined Organic Diseases	2
188.	Sudden Death	13
189a.	Cause of Death not Specified or Ill-Defined	127
189b	No Disease, Feigned Disease.	128
	Total	4,002

Stillbirths registered as deaths, 230
Deaths of Infants under one year not certified to by Physician, 221

REGISTRATIONS received from Registrars throughout the respective Electoral Districts, 1912

BIRTHS BY ELECTORAL DISTRICTS	MONTHS												Tota
	January	February	March	April	May	June	July	August	September	October	November	December	
Alexandra	21	13	20	29	18	18	19	12	16	19	9	16	210
Athabasca	8	10	13	12	12	13	9	9	9	6	8	7	116
Camrose	22	16	35	29	24	25	18	27	24	24	15	13	272
Cardston	14	6	14	12	9	8	10	15	11	16	13	15	143
Claresholm	16	14	21	13	15	19	8	16	12	10	5	8	157
Cochrane	8	4	6	9	7	6	11	6	6	3	4	6	76
Didsbury	19	7	10	12	20	15	7	8	9	14	16	15	152
Gleichen	8	16	12	12	17	25	10	17	15	24	13	11	180
High River	7	6	7	15	10	4	6	8	9	17	13	5	107
Innisfail	11	6	12	8	6	7	8	7	7	8	11	8	99
Lacombe	1	2	3	2	3	3	4	1	1	2	3	2	27
Lac Ste. Anne	8	12	5	6	9	7	5	12	16	2	7	4	93
Leduc	13	13	15	10	15	11	14	12	13	12	17	16	161
Lethbridge	34	41	27	39	33	42	37	31	31	34	32	23	404
Macleod	8	6	7	4	12	9	5	2	6	6	8	10	83
Medicine Hat	54	35	53	43	59	53	57	57	56	53	38	40	598
Nanton	9	9	11	8	6	13	13	7	6	12	10	4	118
Okotoks	5	4	4	1	3	6	4	2	3	3	4	1	40
Olds	20	6	11	11	12	11	16	16	10	10	9	17	149
Pakan	34	44	59	48	40	32	38	45	40	43	32	41	496
Peace River	3	7	2	5	4	4	..	7	5	2	4	6	49
Pembina	7	7	1	5	5	5	4	5	1	9	4	3	56
Ponoka	12	8	7	13	11	9	6	4	6	7	7	3	93
Pincher Creek	3	3	7	3	3	6	6	3	7	9	4	3	57
Red Deer	18	13	19	16	17	13	10	13	12	6	12	16	165
Rocky Mountain	19	27	25	21	24	24	27	17	23	19	23	15	264
Sedgewick	36	32	36	31	41	30	22	32	31	41	36	33	391
St. Albert	20	20	12	23	11	19	20	16	29	20	3	10	213
Stettler	35	42	43	30	34	26	30	37	36	35	26	30	404
Stony Plain	11	12	14	6	6	8	14	9	7	6	7	13	113
Strathcona	19	18	17	17	26	13	21	23	36	31	26	14	261
Sturgeon	23	13	17	16	17	10	14	30	26	22	21	14	213
Vermilion	37	35	23	33	37	26	14	26	16	34	19	37	337
Vegreville	33	48	65	56	42	38	47	38	44	34	32	34	511
Victoria	23	22	26	12	23	26	13	24	24	14	18	18	243
Wetaskiwin	10	19	5	9	8	10	9	13	7	11	8	7	116
Calgary City	140	135	158	118	145	149	139	173	151	140	177	197	1,822
Edmonton City	83	84	76	65	83	94	79	103	112	72	76	90	1,017
Lethbridge City	22	25	28	20	20	31	17	21	25	24	29	16	278
Total	874	840	926	822	887	868	791	904	898	854	799	821	10,284

REGISTRATIONS received from Registrars throughout the respective Electoral Districts, 1912

DEATHS BY ELECTORAL DISTRICTS	MONTHS												Total
	January	February	March	April	May	June	July	August	September	October	November	December	
Alexandra	11	8	8	7	6	9	9	6	6	5	11	3	89
Athabasca	1	..	5	3	..	2	7	4	..	6	5	6	39
Camrose	8	9	9	11	5	7	7	7	7	4	4	1	79
Cardston	2	1	4	2	3	..	3	2	7	3	4	3	34
Claresholm	1	3	9	9	5	5	3	4	9	5	3	3	59
Cochrane	..	4	..	3	1	..	2	1	2	1	1	..	15
Didsbury	5	3	8	7	6	2	5	5	5	7	4	1	58
Gleichen	2	..	8	2	5	3	8	6	11	5	7	..	57
High River	2	3	3	5	5	3	3	5	6	5	3	7	50
Innisfail	1	1	5	3	1	3	4	2	3	4	..	2	29
Lacombe	1	..	..	..	3	..	2	2	..	..	1	..	9
Lac Ste. Anne	2	2	3	2	2	1	6	3	3	3	5	3	35
Leduc	3	4	2	4	5	4	5	2	..	2	3	2	36
Lethbridge	6	20	7	1	9	6	7	6	4	2	5	3	76
Macleod	7	1	3	1	5	3	4	4	4	1	4	3	40
Medicine Hat	26	13	16	13	25	32	30	29	20	15	17	13	249
Nanton	6	2	3	4	2	3	..	2	..	5	4	2	33
Okotoks	1	1	..	..	..	..	..	..	3	..	..	..	5
Olds	4	3	..	7	1	2	3	6	2	3	2	8	41
Pakan	13	19	18	12	7	13	15	15	10	7	11	12	152
Peace River	..	..	..	6	1	1	1	..	2	..	..	..	11
Pembina	2	..	2	..	..	1	2	..	1	3	1	1	13
Pincher Creek	1	1	4	2	2	2	2	8	2	4	..	1	29
Ponoka	5	2	4	2	4	5	2	7	3	4	4	3	45
Red Deer	6	4	12	5	10	5	6	9	4	5	6	6	78
Rocky Mountain	10	7	6	13	3	6	14	16	9	8	5	6	106
Sedgewick	7	9	8	14	9	5	12	12	16	8	5	13	118
St. Albert	6	8	10	8	3	3	1	8	5	4	2	2	60
Stettler	16	4	18	14	9	14	9	15	9	7	7	4	126
Stony Plain	3	1	2	7	2	4	..	3	2	..	3	1	28
Strathcona	7	6	11	1	6	6	9	8	14	7	7	12	94
Sturgeon	3	2	4	13	2	1	4	2	5	7	1	3	47
Vermilion	3	5	12	2	8	4	3	7	3	1	2	4	54
Vegreville	10	10	26	20	13	15	14	21	17	15	12	8	181
Victoria	4	3	7	9	3	9	5	12	9	4	7	..	72
Wetaskiwin	6	4	3	6	9	6	5	6	4	3	2	3	57
Calgary City	59	58	74	78	71	65	138	152	113	88	72	74	1,042
Edmonton City	45	44	66	50	58	59	71	67	47	71	56	55	689
Lethbridge City	19	13	19	14	11	14	8	34	19	16	9	21	197
Total	314	278	399	360	320	323	429	498	386	338	298	289	4.232

CERTIFIED EXTRACTS, SEARCHES AND AUTHORITIES TO REGISTER, 1912:

331	Certified Extracts.
72	Authorities to Register.
31	Searches of Records.

MARRIAGES BY DENOMINATIONS AND AGES—ELECTORAL DISTRICTS, 1912

SEX	RELIGIOUS DENOMINATIONS OF GROOM AND BRIDE Presbyterian	Methodist	Anglican	Roman Catholic	Lutheran	Baptist	Greek Catholic	Latter Day Saints	Moravians	Evangelical R'f'd.	Mennonite	Salvation Army	Congregationalist	Gr. Ortho. & Ind.	Others	Not Stated		ELECTORAL DISTRICTS	AGES Under 16	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 60	Over 60	
Males	24	13	12	13	11	5	2	1	...					...	...	3	84	Alexandra—	...	6	25	26	12	6	3	4	2	...	84
Females	15	18	15	15	7	5	2	1	...				3	...	2	1	84		2	25	24	15	9	5	2	2	...	...	84
Total	39	31	27	28	18	10	4	2	...				3	...	2	4	168		2	31	49	41	21	11	5	6	2	...	168
Males	2	1	2	29	1	...										2	37	Athabasca—	...	3	12	13	3	3	...	1	1	1	37
Females	1	2	3	27	2	...			...							2	37		3	14	6	5	4	2	...	2	1	...	37
Total	3	3	5	56	3	...			...							4	74		3	17	18	18	7	5	...	3	2	1	74
Males	5	10	2	22	37	5	1	...	1						1	1	85	Camrose—	...	4	27	27	20	2	2	1	2	...	85
Females	5	9	2	22	36	7	1	...	1	...	...	...	...	...	1	1	85		...	36	32	9	3	3	...	1	1	...	85
Total	10	19	4	44	73	12	2	...	2	...	...	...	...	...	2	2	170		...	40	59	36	23	5	2	2	3	...	170
Males	5	4	2	4	1	1	...	24	...	3	...	...	1	...	...	2	47	Cardston—	...	1	30	9	5	...	...	1	1	...	47
Females	4	5	1	3	...	1	...	29	...	4	...	...	...	...	...	...	47		...	16	25	4	...	...	...	1	1		47
Total	9	9	3	7	1	2	...	53	...	7	...	...	1	...	...	2	94		...	17	55	13	5	...	...	2	2	...	94
Males	8	16	5	3	6	1	...	...	...				...	...	2	2	43	Claresholm—	...	...	18	15	7	3	...				43
Females	7	17	4	2	6	2	...	1	...				...	...	3	1	43		...	18	15	6	3	1	...	...			43
Total	15	33	9	5	12	3	...	1	...						5	3	86		...	18	33	21	10	4					86

M ARRIAGES BY DENOMINATIONS AND AGES—ELECTORAL DISTRICTS, 1912—Continued

Sex	Religious Denominations of Groom and Bride																	Electoral Districts	Ages										
	Presbyterian	Methodist	Anglican	Roman Catholic	Lutheran	Baptist	Greek Catholic	Latter Day Saints	Moravians	Evangelical R'f'd.	Mennonite	Salvation Army	Congregationalist	Gr. Ortho. & Ind.	Others	Not Stated			Under 16	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 60	Over 60	
Males	2	4	4	2	...	1	...	...	...	...	...	...	...	...	...	...	13	Cochrane—	...	...	4	7	...	2	...	...	...	...	13
Females	3	4	3	1	...	1	...	...	...	...	...	...	...	...	...	1	13		...	7	3	2	1	...	...	...	...	...	13
Total	5	8	7	3	...	2	...	...	...	...	...	...	...	...	...	1	26		...	7	7	9	1	2	...	...	...	...	26
Males	8	14	9	1	2	1	...	...	...	3	3	...	1	...	1	3	45	Didsbury—	...	2	10	21	5	2	2	1	2	...	45
Females	11	7	8	1	3	3	...	...	...	2	2	...	1	...	...	6	45		...	21	8	5	7	1	1	2	...	...	45
Total	19	21	17	2	5	4	...	...	...	5	5	...	2	...	1	9	90		...	23	18	26	12	3	3	3	2	...	90
Males	17	14	12	10	3	2	...	1	...	...	...	...	2	...	4	...	65	Gleichen—	...	3	27	23	8	2	2	...	...	...	65
Females	10	14	16	11	6	2	...	...	...	...	...	...	2	...	3	1	65		...	26	23	10	2	2	2	...	...	...	65
Total	27	28	28	21	9	4	...	1	...	...	...	...	4	...	7	1	130		...	29	50	33	10	4	4	...	...	...	130
Males	11	2	7	5	4	4	...	1	...	...	...	...	...	...	...	2	36	High River—	...	...	17	10	8	...	...	1	...	...	36
Females	10	7	9	2	2	3	...	1	...	...	...	...	...	...	1	1	36		...	13	14	2	7	...	...	...	...	...	36
Total	21	9	16	7	6	7	...	2	...	...	...	...	...	...	1	3	72		...	13	31	12	16	...	...	1	...	...	72
Males	16	8	10	...	4	1	...	...	...	...	...	...	...	...	...	...	39	Innisfail	...	1	10	15	11	2	...	...	...	...	39
Females	13	9	10	1	4	2	...	...	...	...	...	...	...	...	...	...	39		...	14	14	9	1	1	...	...	...	...	39
Total	29	17	20	1	8	3	...	...	...	...	...	...	...	...	...	...	78		...	15	24	24	12	3	...	...	...	...	78

Males	1	4	2	1	3	...	...	...	...	...	...	...	...	...	4	1	16
Females	1	7	...	1	1	1	...	...	...	...	...	...	...	...	2	3	16
Total	2	11	2	2	4	1	...	...	...	...	...	...	...	...	6	4	32
Males	4	2	6	4	4	1	1	...	...	...	...	...	...	...	...	...	22
Females	1	3	7	6	4	1	...	...	...	...	...	...	...	...	...	...	22
Total	5	5	13	10	8	2	1	...	...	...	...	...	...	...	...	...	44
Males	3	3	5	2	6	5	4	...	1	...	...	...	...	...	...	1	30
Females	4	1	6	1	6	4	5	...	...	...	...	...	...	...	1	2	30
Total	7	4	11	3	12	9	9	...	1	...	...	...	...	...	1	3	60
Males	16	26	13	10	8	3	...	12	...	...	...	...	1	1	1	3	94
Females	9	20	17	11	13	3	...	14	...	1	...	...	2	1	2	1	94
Total	25	46	30	21	21	6	...	26	...	1	...	...	3	2	3	4	188
Males	13	9	9	6	...	...	...	3	...	...	...	...	...	...	...	2	42
Females	9	10	11	6	2	...	...	3	...	...	...	1	...	...	...	...	42
Total	22	19	20	12	2	...	...	6	...	...	...	1	...	...	...	2	84
Males	42	35	29	23	46	18	...	...	1	4	...	1	4	...	10	6	219
Females	41	32	24	31	48	19	...	...	...	6	...	1	6	...	8	3	219
Total	83	67	53	54	94	37	...	...	1	10	...	2	10	...	18	9	438
Males	2	3	8	1	2	1	...	...	...	...	...	...	...	...	5	1	23
Females	4	5	7	1	3	...	...	...	...	...	...	...	...	...	1	2	23
Total	6	8	15	2	5	1	...	...	...	...	...	...	...	...	6	3	46
Males	2	...	2	...	...	...	...	...	...	1	...	...	...	...	1	...	6
Females	1	1	4	...	...	...	...	...	...	...	...	...	...	...	...	...	6
Total	3	1	6	...	...	...	...	...	...	1	...	...	...	...	1	...	12

Lacombe—	...	...	7	7	1	1	...	...	...	...	16
	...	9	7	...	...	...	...	...	...	...	16
		9	14	7	1	1	...	...	...	...	32
Lac Ste. Anne—	...	...	7	7	4	3	1	...	...	...	22
	1	8	6	4	2	...	...	...	1	...	22
	1	8	13	11	6	3	1	...	1	...	44
Leduc—	...	2	9	10	5	1	2	...	1	...	30
	...	18	6	4	...	1	...	1	...	...	30
	...	20	15	14	5	2	2	1	1	...	60
Lethbridge—	...	3	42	30	11	6	...	1	1	...	94
	...	39	34	11	7	1	1	...	1	...	94
	...	42	76	41	18	7	1	1	2	...	188
Macleod—	...	2	20	12	6	1	...	...	1	...	42
	...	12	21	8	1	...	...	...	...	...	42
	...	14	41	20	7	1	...	...	1	...	84
Medicine Hat—	...	8	98	73	18	12	1	5	3	1	219
	4	90	73	31	10	4	2	4	...	1	219
	4	98	171	104	28	16	3	9	3	2	438
Nanton—	...	1	8	8	3	2	1	...	...	...	23
	...	6	9	4	3	1	...	...	...	...	23
	...	7	17	12	6	3	1	...	...	...	46
Okotoks—	...	...	2	4	...	...	...	...	...	...	6
	...	2	2	2	...	...	...	...	...	...	6
	...	2	4	6	...	...	...	...	...	...	12

MARRIAGES BY DENOMINATIONS AND AGES--ELECTORIAL DISTRICTS, 1912--Continued

Sex	Religious Denominations of Groom and Bride																Electoral Districts	Ages										
	Presbyterian	Methodist	Anglican	Roman Catholic	Lutheran	Baptist	Greek Catholic	Latter Day Saints	Moravians	Evangelical R'f'd	Mennonite	Salvation Army	Congregationalist	Gr. Ortho. & Ind.	Others	Not Stated			Under 16	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 60	Over 60	
Males	10	11	9	3	5	6	...	...	...	1	1	...	1	...	1	4	52	Olds—	...	1	22	21	7	1	...	...	...	...	52
Females	10	12	9	2	5	9	...	...	...	2	...	...	...	...	...	3	52		...	27	16	9	...	...	...	...	...	...	52
Total	20	23	18	5	10	15	...	...	...	3	1	...	1	...	1	7	104		...	28	38	30	7	1	...	...	...	...	104
Males	2	2	3	27	3	...	17	...	...	...	...	...	...	20	...	1	75	Pakan—	...	4	44	20	4	1	2	...	...	...	75
Females	1	2	4	27	2	...	17	...	...	1	...	...	...	20	1	...	75		4	47	16	4	3	...	1	...	...	...	75
Total	3	4	7	54	5	...	34	...	...	1	...	...	...	40	1	1	150		4	51	60	24	7	1	3	...	...	...	150
Males	...	1	1	3	...	...	...	...	...	...	...	...	...	...	1	1	7	Peace River—	...	...	3	1	3	...	...	...	...	...	7
Females	...	1	2	3	...	...	...	...	...	...	...	...	...	...	1	...	7		...	3	2	2	...	...	...	...	...	...	7
Total	...	2	3	6	...	...	...	...	...	...	...	...	...	...	2	1	14		...	3	5	3	3	...	...	...	...	...	14
Males	4	4	3	2	2	2	...	...	...	...	...	...	...	...	...	2	19	Pembina—	...	1	9	3	1	4	...	...	1	...	19
Females	5	3	4	1	2	3	...	...	...	...	...	...	...	...	...	1	19		...	10	5	...	...	3	...	...	1	...	19
Total	9	7	7	3	4	5	...	...	...	...	...	...	...	...	...	3	38		...	11	14	3	1	7	...	...	2	...	38
Males	7	2	3	6	1	...	...	...	...	...	...	...	1	...	...	...	20	Pincher Creek—	...	1	7	4	5	1	1	...	1	...	20
Females	5	2	3	7	1	1	...	...	...	...	...	...	1	...	...	...	20		...	6	9	2	2	...	...	...	1	...	20
Total	12	4	6	13	2	1	...	...	...	...	...	...	2	...	...	...	40		...	7	16	6	7	1	1	...	2	...	40

Males	5	6	3	5	6	2	...	...	...	...	...	...	...	...	1	2	30	Ponoka—	...	...	12	7	8	1	1	1	...	...	30
Females	3	6	4	6	6	3	...	...	...	...	...	...	1	...	...	1	30		...	14	8	3	3	2	...	...	...	...	30
Total	8	12	7	11	12	5	...	...	...	...	...	...	1	...	1	3	60		...	14	20	10	11	3	1	1	...	...	60
Males	17	13	17	8	7	2	...	...	...	...	...	1	2	...	4	...	71	Red Deer—	...	2	21	26	11	7	3	1	...	...	71
Females	14	15	17	9	6	4	...	...	...	...	...	...	1	...	5	...	71		2	23	26	9	6	2	3	...	...	...	71
Total	31	28	34	17	13	6	...	...	...	...	...	1	3	...	9	...	142		2	25	47	35	17	9	6	1	...	...	142
Males	21	16	26	40	8	4	1	...	...	...	...	...	...	...	1	2	119	Rocky Mountain—	...	1	41	49	21	5	2	...	...	...	119
Females	25	12	19	43	10	4	1	...	...	...	...	1	2	...	2	...	119		1	44	42	23	6	1	...	2	...	...	119
Total	46	28	45	83	18	8	2	...	...	...	...	1	2	...	3	2	238		1	45	83	72	27	6	2	2	...	...	238
Males	23	30	15	13	26	4	1	1	...	...	...	...	...	...	6	1	120	Sedgewick—	...	2	31	50	19	9	7	1	...	1	120
Females	18	28	16	15	26	5	1	...	...	...	1	...	3	...	5	2	120		...	43	48	12	8	4	3	...	2	...	120
Total	41	58	31	28	52	9	2	1	...	...	1	...	3	...	11	3	240		...	45	79	62	27	13	10	1	2	1	240
Males	...	2	...	40	...	...	...	...	...	...	...	...	...	...	...	...	42	St. Albert—	...	5	12	12	8	3	...	1	1	...	42
Females	2	2	...	37	1	...	...	...	...	...	...	...	...	...	...	...	42		...	18	10	8	3	2	1	...	...	...	42
Total	2	4	...	77	1	...	...	...	...	...	...	...	...	...	...	...	84		...	23	22	20	11	5	1	1	1	...	84
Males	22	24	11	8	13	9	...	...	...	1	...	...	3	...	5	6	102	Stettler—	...	1	32	35	22	4	1	2	4	1	102
Females	26	19	15	11	8	11	1	...	...	1	...	...	...	...	6	4	102		...	30	33	19	13	4	...	1	1	1	102
Total	48	43	26	19	21	20	1	...	...	2	...	...	3	...	11	10	204		...	31	65	54	35	8	1	3	5	2	204
Males	...	1	...	1	14	...	3	...	...	...	...	...	...	...	...	...	19	Stony Plain—	...	1	11	7	...	...	...	...	...	...	19
Females	...	1	...	...	15	...	3	...	...	...	...	...	...	...	...	...	19		...	13	5	1	...	...	...	...	...	...	19
Total	...	2	...	1	29	...	6	...	...	...	...	...	...	...	...	...	38		...	14	16	8	...	...	...	...	...	...	38
Males	23	16	17	13	18	12	1	...	2	...	...	...	2	...	4	2	110	Strathcona—	...	3	27	47	16	8	4	2	2	1	110
Females	25	17	19	16	15	8	1	...	5	...	...	...	2	...	...	2	110		...	32	33	28	9	3	3	2	...	...	110
Total	48	33	36	29	33	20	2	...	7	...	...	...	4	...	4	4	220		...	35	60	75	25	11	7	4	2	1	220

MARRIAGES BY DENOMINATIONS AND AGES—ELECTORAL DISTRICTS, 1912—Continued

SEX	RELIGIOUS DENOMINATIONS OF GROOM AND BRIDE																	ELECTORAL DISTRICTS	AGES										
	Presbyterian	Methodist	Anglican	Roman Catholic	Lutheran	Baptist	Greek Catholic	Latter Day Saints	Moravians	Evangelical R'f'd.	Mennonite	Salvation Army	Congregationalist	Gr. Ortho. & Ind.	Others	Not Stated			Under 16	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 60	Over 60	
Males	1	2	3	7	...	...	10	...	...	...	...	...	...	...	...	...	23	Sturgeon—	...	...	12	8	1	2	...	...	...	...	23
Females	...	3	3	8	...	...	9	...	...	...	...	...	...	...	...	...	23		...	14	7	2	...	...	...	...	...	...	23
Total	1	5	6	15	...	...	19	...	...	...	...	...	...	...	...	...	46		...	14	19	10	1	2	...	...	...	...	46
Males	7	11	8	6	2	5	14	...	...	...	...	...	...	...	2	1	56	Vermilion—	...	1	23	20	6	3	3	...	...	...	56
Females	9	11	7	3	1	4	14	...	...	...	...	...	2	...	5	...	56		...	26	16	10	2	1	1	...	...	...	56
Total	16	22	15	9	3	9	28	...	...	...	...	...	2	...	7	1	112		...	27	39	30	8	4	4	...	...	...	112
Males	6	8	7	24	8	3	65	...	...	...	...	...	...	27	2	...	150	Vegreville—	...	13	83	35	9	3	4	2	1	...	150
Females	4	7	9	22	10	1	69	...	...	...	...	...	...	27	1	...	150		2	115	20	10	2	1	...	...	...	...	150
Total	10	15	16	46	18	4	134	...	...	...	...	...	...	54	3	...	300		2	128	103	45	11	4	4	2	1	...	300
Males	4	9	2	14	3	...	31	...	2	1	...	...	...	5	...	1	72	Victoria—	...	2	40	18	7	3	2	...	...	...	72
Females	3	10	3	13	2	1	31	...	2	1	...	...	...	5	...	1	72		...	56	6	3	3	3	1	...	...	...	72
Total	7	19	5	27	5	1	62	...	4	2	...	...	...	10	...	2	144		...	58	46	21	10	6	3	...	...	...	144
Males	6	23	8	10	18	5	...	...	...	...	...	...	1	...	2	2	75	Wetaskiwin—	...	3	30	23	11	2	2	1	3	...	75
Females	6	22	7	7	27	3	...	...	...	...	...	...	1	...	2	...	75		1	28	30	9	2	2	2	...	1	...	75
Total	12	45	15	17	45	8	...	...	...	...	...	...	2	...	4	2	150		1	31	60	32	13	4	4	1	4	...	150

Males	323	264	308	127	50	104	12	3	2	5	1	4	15	...	32	26	1,276	Calgary City—	...	15	435	490	199	76	35	11	13	2	1,276
Females	304	249	334	137	58	100	10	4	...	6	...	6	10	...	40	18	1,276		2	249	513	321	129	43	9	7	3	...	1,276
Total	627	513	642	264	108	204	22	7	2	11	1	10	25	...	72	44	2,552		2	264	948	811	328	119	44	18	16	2	2,552
Males	171	140	164	83	37	52	54	...	...	2	...	2	13	6	19	23	766	Edmonton City—	...	8	245	293	133	48	19	10	7	3	766
Females	178	123	164	93	55	51	53	1	...	1	1	2	11	4	18	11	766		2	191	297	170	62	24	9	7	3	1	766
Total	349	263	338	176	92	103	107	1	...	3	1	4	24	10	37	34	1,532		2	199	542	463	195	72	28	17	10	4	1,532
Males	58	60	53	41	20	11	17	3	1	1	...	...	1	...	8	5	279	Lethbridge City—	...	4	102	102	38	19	6	3	3	2	279
Females	60	59	47	42	26	6	15	10	1	2	...	...	4	...	7	...	279		1	86	103	52	24	5	5	1	2	...	279
Total	118	119	100	83	46	17	32	13	2	3	...	...	5	...	15	5	558		1	90	205	154	62	24	11	4	5	2	558

MARRIAGES—Religious Denominations of Contracting Parties

Officiating Clergymen	Total Brides	DENOMINATIONS	BRIDEGROOMS																		
			Presbyterian	Methodist	Anglican	Roman Catholic	Lutheran	Baptist	Greek Catholics	Latter Day Saints	Moravians	Evangelical R'f'd.	Mennonite	Salvation Army	Congregationalist	Gr. Ortho. & Ind.	Hebrews	7th Day Adventists	Others	Not Stated	Total Bridegrooms
1,128	851	Presbyterians	549	107	102	22	13	31		2					9	1			11	4	851
1,070	773	Methodists	103	468	76	20	21	47				3			8				21	6	773
750	844	Anglicans	110	99	513	31	18	27	1		1	1			10			1	16	16	844
705	790	Roman Catholics	33	18	31	654	8	12	1	2									13	18	790
243	414	Lutherans	21	32	24	16	289	11	1		2		1			2			10	5	414
274	272	Baptists	39	49	25	9	10	122	1		1	1			3				7	5	272
58	101	Greek Catholics							101												101
48	67	Latter Day Saints	6	5	4	1		3		46										2	67
12	8	Moravians					1	2			5										8
24	22	Evangelical Reformed	2	1	2		5					9							1	2	22
..	4	Mennonite			1			1					2								4
1	13	Salvation Army	1	2	1									9							13
9	52	Congregationalists	10	5	9	3	4	3							16				2		52
19	22	Greek Orthodox and Independent										1				21					22
9	12	Hebrews															12				12
4	11	Seventh Day Adventists				2	2											7			11
47	104	Others	12	23	6	6	6	8							2				39	2	104
9	50	Not Stated	1	2	1	4	3	2												37	50
4,410	4,410		887	811	795	768	380	269	105	50	9	15	3	9	48	24	12	8	120	97	4,410

MARRIAGES—Origin of Contracting Parties

		BRIDEGROOMS															
		English Speaking Countries					Others										
	BRIDES	Canada	United Kingdom	United States	Other British Colonies	Totals	Germany	Russia	Austria	Norway & Sweden	France	Italian	Galician	Belgium	Danish	Others	Not Stated	Totals
English Speaking Countries	Canada	763	191	207	6	1,167	6	9	8	6	3	..	..	3	2	6	..	1,210
	United Kingdom	1,190	906	121	19	1,236	9	4	..	7	2	1	..	1	4	2	..	1,266
	United States	256	121	588	5	970	15	13	3	34	3	..	..	..	6	6	..	1,050
	Other British	4	8	2	2	16	..	..	1	..	..	..	..	..	..	..	..	17
	Total	1,213	1,226	918	32	3,389	30	26	12	47	8	1	..	4	12	14	..	3,543
Others	Germany	8	2	12	..	22	26	1	2	2	2	..	..	..	..	2	..	57
	Russia	7	3	19	..	29	15	109	3	1	..	..	..	..	..	..	..	157
	Austria	6	1	4	..	11	2	6	316	..	1	1	4	..	..	..	..	341
	Norway and Sweden	3	12	31	..	46	..	1	..	74	..	..	..	..	1	1	..	123
	France	6	1	..	..	7	..	..	..	..	5	2	..	..	..	3	..	17
	Italian	..	2	1	..	3	..	..	1	..	..	27	..	..	..	..	..	31
	Galician	..	..	..	..	..	..	4	2	..	..	..	87	..	..	..	..	93
	Belgium	3	1	..	..	4	..	..	..	..	..	..	..	8	..	..	..	12
	Danish	1	..	4	..	5	..	..	..	..	..	..	..	..	9	..	..	14
	Others	6	4	2	..	12	..	..	..	..	..	1	1	..	..	19	..	33
	Not Stated	1	2	1	..	4	..	..	..	..	..	..	..	..	..	1	3	8
	Totals	1,254	1,254	992	32	3,532	73	147	336	124	16	32	92	12	22	40	3	4,429

DENOMINATIONS OF OFFICIATING CLERGYMEN

Presbyterian	1,128
Methodist	1,070
Anglican	750
Roman Catholic	705
Lutheran	243
Baptist	274
Greek Catholic	58
Latter Day Saints	48
Evangelical Reformed	24
Seventh Day Adventists	4
Moravian	12
Mennonite	
Salvation Army	1
Congregationalist	9
Greek Orthodox and Independent	19
Hebrews	9
Others	47
Not Stated	9
Total	4,410

MEAN MARRIAGE AGE

Year	Male	Female	Year	Male	Female
1901	28.78	22.42	1907	27.45	23.98
1902	27.10	22.88	1908	30 23	24.19
1903	28.31	22.98	1909	28.94	24.22
1904	28.53	23.41	1910	28.72	24.18
1905	28.34	23.06	1911	28.46	23.84
1906	28.82	22.59	1912	28.25	23.98

BIRTHS and RATIO OF BIRTHS TO DEATHS

Year	Births of Males to 1,000 births of Females	Ratio of Births to Deaths	Year	Births of Males to 1,000 births of Females	Ratio of Births to Deaths
1901	1,081	3.55	1907	1,075	2.96
1902	1,010	2.59	1908	1,077	2.73
1903	1,056	2.95	1909	1,086	2.59
1904	1,118	3.04	1910	1,065	2.69
1905	1,059	3.11	1911	1,103	2.43
1906	1,094	2.07	1912	1,084	2.43

DEATH OF INFANTS UNDER ONE YEAR

To 1,000 births, 1912..............................124.75
To 1,000 deaths from all causes, 1912 ....303.16

REGISTRATIONS received from Registrars throughout the respective Electoral Districts, 1912

DEATHS BY ELECTORAL DISTRICTS				UNDER ONE YEAR	
Electoral Districts	Male	Female	Total	Male	Female
Alexandra	44	45	89	14	10
Athabasca	23	16	39	8	6
Camrose	48	31	79	18	9
Cardston	18	16	34	5	6
Claresholm	40	19	59	14	5
Cochrane	6	9	15	1	1
Didsbury	32	26	58	8	3
Gleichen	43	14	57	9	8
High River	28	22	50	11	4
Innisfail	20	9	29	8	3
Lacombe	3	6	9	..	2
Lac Ste Anne	28	7	35	9	..
Leduc	17	19	36	10	5
Lethbridge	50	26	76	16	14
Macleod	31	9	40	4	3
Medicine Hat	159	90	249	60	29
Nanton	16	17	33	4	3
Okotoks	2	3	5	1	1
Olds	27	14	41	9	2
Pakan	74	78	152	32	27
Peace River	5	6	11	..	1
Pembina	7	6	13	1	3
Pincher Creek	18	11	29	2	3
Ponoka	31	14	45	8	..
Red Deer	41	37	78	6	5
Rocky Mountain	71	35	106	12	12
Sedgewick	68	50	118	13	20
St. Albert	37	23	60	13	8
Stettler	72	54	126	17	14
Stony Plain	15	13	28	8	6
Strathcona	50	44	94	13	13
Sturgeon	35	12	47	14	4
Vermilion	28	26	54	18	9
Vegreville	102	79	181	37	26
Victoria	36	36	72	15	12
Wetaskiwin	37	20	57	12	3
Calgary City	621	421	1,042	161	147
Edmonton City	432	257	689	115	86
Lethbridge City	121	76	197	31	33
Total	2,536	1,696	4,232	737	546

IV.---MISCELLANEOUS

Under this heading is grouped comments on a number of subjects of more or less importance.

IRRIGATION

Each year the place that irrigation is to serve in this Province is becoming more clearly defined. It can never be used on an extensive scale for growing grain and must therefore be associated with some kind of intensive farm operation. In the Lethbridge district the successful growth of Alfalfa is closely identified with irrigation. It is estimated that over 10,000 acres of Alfalfa are growing in the district tributary to Lethbridge. A very large percentage of the area is on irrigated land and by the use of water immediately after cutting three good growths are harvested averaging from five to seven tons per acre. It can thus be readily seen that any land capable of being irrigated has possibilities along intensive lines of farming that the ordinary land does not possess. The right use of water in our comparatively cool climate is still an unsettled problem. Many farmers are now inclined to the belief that were the water turned on the land late in the fall and then the land cultivated along the lines recommended for dry farming, that the best results would be attained, especially for grain. In accordance with this idea the irrigation companies were asked to allow the water to remain in the ditches for a later period than they had in the past. This request was refused on the ground that were the water to be left any later it would freeze in the ditch and possibly do damage to the embankments, besides delaying the use of the water in the early spring. This is a matter which the irrigation companies will no doubt test out in order to ascertain which is really the better way.

The annual meeting of the Western Canada Irrigation Association was held in Kelowna, B. C. The department was represented by the Deputy Minister and quite a large attendance of those interested in irrigation in the province were present. The meeting was a very successful one, a trip was made through the country surrounding Kelowna and the convention closed with an excursion trip down the lake, and ended with a banquet at Penticton. The next convention will be held in Lethbridge.

DRY FARMING CONGRESS

Immediately upon the close of the congress at Colorado Springs in October, 1911, the staff of the International Dry-Farming Congress moved to Alberta with Lethbridge as its headquarters. From this point all the literature of the congress was issued for the year. The department was in close touch with the work of the congress throughout, rendering every assistance possible. The Chief Publicity Commissioner and the Deputy Minister, as well as yourself, sir, each made special trips to different groups of states in the country south of the bonudary in the interest of the congress. Thus on the whole the officers of the department devoted considerable of their time to the intersts of the congress in order that it might be a great success and the province might obtain as large amount of publicity as possible. As a result of this work in conjunction with that of the publicity branch of the congress, Alberta was well advertised. News items about the varied natural resources of the province, its climate and the many opportunities it offers to intending settlers, were sent in connection with news items about the congress to agricultural papers throughout Canada, the United States and the other English speaking nations, to semi-agricultural papers and to general weeklies. Much of this appeared in print and on the whole the province has every reason to be satisfied with the publicity obtained through this means .

The work of the congress was liberally supported by the Dominion Government as well as that of our sister provinces, Saskatchewan and British Columbia. The railway companies also made very liberal contributions. In this way the congress was well financed. The good people of Lethbridge went to no end of expense to make their city as presentable as possible and admirably succeeded in their efforts. For so small a place to entertain so large a convention was somewhat of a task as there was a great dearth of good hotel accommodation. This was met by the citizens throwing open their homes and every delegate was well provided for through the means of a billeting committee.

The attendance at the congress was the largest ever brought together at any agricultural convention ever held on the continent. The attendance of farmers from Alberta, Saskatchewan, Manitoba and British Columbia was large, but the number of delegates in attendance from across the line to the south of us was most disappointing. This was due to the fact that the railway companies refused to grant adequate rates and so curtailed the time allowance that it made it very difficult for many to attend and impossible for any one to take the opportunity of seeing anything of the province. This no doubt was done with a view to preventing any large number of farmers having an opportunity of seeing Canada. Such a policy is in keeping with the general antagonistic attitude of the railway companies and the governments generally toward the movement of American farmers to Canada. Such an attitude is only natural as these railway companies are looking for settlers for their extensive land grants and so is the government of every state.

In spite of these untoward conditions the congress brought together the largest gathering of agricultural experts and farmers from all over the world. Some fifteen foreign countries were represented by delegates.

The exposition of dry farmed products in connection with the congress proved a great success, being by far the largest exhibit yet shown and really assumed the proportions of a miniature world's fair. So splendid and varied were the exhibits that the exposition became a counter attraction to the regular sessions of the congress. An excellent exhibit of the agricultural products of the province was made at the exposition of dry farmed products made under the direction of the Chief Publicity Commissioner and though barred from competing, this exhibit was voted by all who saw it, the best exhibit on the grounds.

CHANGES IN STAFF.

A number of minor changes in the staff of the department have as usual, taken place, as will always be the case through clerks resigning and new ones taking their place. Dr. L. E. W. Irving, Provincial Medical Officer of Health, resigned and was succeeded by Dr. W. C. Laidlaw. Toward the close of the year the work of the Poultry Branch was enlarged by the addition of Mr. Joseph Shackleton as manager of the Poultry Breeding Station.

In conclusion I wish to state that the thanks of the department are due to the press of the province for their readiness to publish any information furnished and for their willingness to assist whenever it lay in their power, the work that the department had in hand.

I have the honour to be, Sir,

Your obedient servant,

GEO. HARCOURT,
Deputy Minister of Agriculture.

2.—*REPORT OF THE DAIRY COMMISSIONER.*

SIR,—I have the honour to submit herewith the report of the Dairy Commissioner's Branch for the year ending December 31, 1912, under the following heads:

I.—General.
II.—Creameries and Cheese Factories.
III.—Marketing of Creamery Butter by the department.
IV.—Educational Butter Scoring Contest.
V.—Commercial Grading of Creamery Butter.
VI.—Convention of Creamery Delegates.
VII.—Judging at Agricultural Exhibitions.
VIII.—Dairy Instruction Work.
IX.—Public Meetings.
X.—Correspondence.
XI.—Acknowledgements.

I.—GENERAL.

The past year was a good one for the dairymen. The dairy production of the province was larger than that of any previous year and the markets were very encouraging with a ready demand and good prices. Some of the more prominent features of the past year's dairy operations are outlined in the following paragraphs.

MARKETS.

The western market for dairy products is expanding at an astonishing rate. In addition to the home production, the consumers of the western provinces "absorbed" large quantities of butter and cheese shipped in from other parts of Canada and even from New Zealand. The growth of the western market during the past ten years is well illustrated in a statement, recently made by Mr. J. A. Ruddick, Dominion Dairy and Cold Storage Commissioner, in the course of his analysis of the general dairy situation of the Dominion. He said: "During the period when the creameries in Alberta and Saskatchewan were operated by the Dominion Government, it was a part of my duty to find a market for butter produced therein. In 1903 the total output of creamery butter in these provinces was less than three-quarters of a million pounds. At that time there was no butter being shipped to the western provinces from Eastern Canada, and yet we found it necessary to export over 100,000 pounds to Great Britain to avoid a serious glut in the British Columbia and prairie markets."

Now contrast that state of affairs with the past year. In the first place, Alberta and Saskatchewan produced about four million pounds of creamery butter in 1912; at least 200,000 boxes or 11,200,000 pounds were shipped from Ontario and Quebec to points west of the great lakes, 100,000 boxes or 5,600,000 pounds will be imported from New Zealand (April, 1912, to March, 1913) making a total of 20,000,000 pounds in 1912-13 as against half a million pounds which met the requirements in 1903-04. These figures refer to creamery butter only, but there has also been a very large increase in the output of dairy butter in the western provinces, most of which is consumed locally.

In order that our dairymen and creamery operators may realize and appreciate the nature of the competition they are up against, I quote a prominent wholesale produce merchant from Montreal who stated last year publicly and through the press, that the shippers in eastern Canada now send their best quality of creamery butter to the western markets, whereas formerly their western shipments were generally lower grades while the best quality was used for export to Great Britain.

So far as the New Zealand product is concerned, we know that the creamery butter which is being imported from that country into western Canada is of uniformally fine grade. There is therefore but one thing for the western producer to do if he wants to successfully cater to the trade in his home markets that demand the best products obtainable, and that thing is to produce the best.

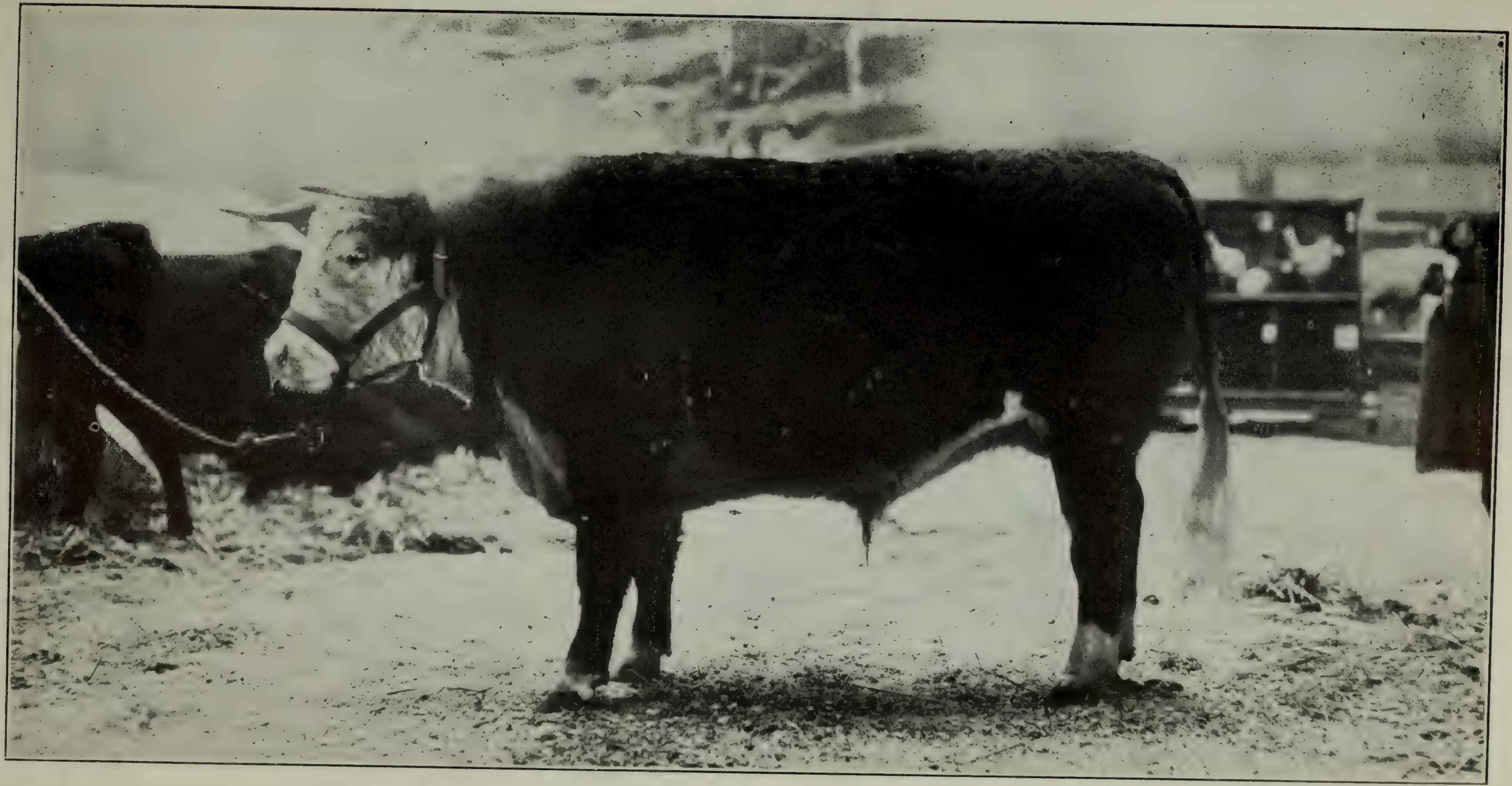
DAIRY STOCK.

The demand for dairy cows has been greater than ever during the past year. While it is difficult to get the exact figures I think we are well within the mark in saying that at least 5,000 dairy cows and heifers have been brought into the province since the beginning of the year. Many of these have been bought by farmers in the central and southern part of the province.

It is to be hoped that this demand, which will undoubtedly increase, will bring with it a realization on the part of the sellers in other parts of Canada and the "middle man" that the western market calls for good animals, not culls. Those who bring dairy stock into Alberta to meet this growing demand will be well advised to bear this in mind.

During the period under review the dairy branch has supervised the testing of pure bred dairy cows for record of performance. The following summary shows the increase in that work:

	1911		1912	
Breeds under test	Herds	Cows	Herds	Cows
Jerseys	1	19	2	15
Ayrshires	1	5	3	24
Holstein Friesian	1	2	3	14
Totals	3	26	8	53



No. 3.—Champion Fat Steer, at the Fat Stock Show, Calgary, 1912.

Some of the animals in this test made splendid records. A rather unique and fitting celebration took place in Red Deer in the evening of Oct. 16th, when the Red Deer board of trade gave a very elaborate and exceedingly well attended banquet in honor of Mr. C. A. J. Sharman, the owner of the splendid Jersey cow "Rosalind of Old Basing" that is now claimed to be the 'long distance performer' champion of her breed in the British Empire. In three years she produced 37,847 pounds of milk, yielding 2,504 pounds of butter. Many leading stock breeders and agriculturists from different parts of the province were in attendance to do honour to the occasion.

CREAMERY BUTTER PRODUCTION.

The butter production of the 53 creameries operated during the year reached the 3,000,000 pound mark, representing a selling value of $810,000 as against 2,540,000 pounds valued at $635,000 for the previous year. This shows an increase of 18% in production and 27½% in value. The average selling price for creamery butter for 1912 was 2 cents per pound higher than in 1911. This is a very satisfactory showing when we consider that the increased population of the province has required a much greater quantity of milk and cream than ever before for table use.

CHEESE PRODUCTION.

The business of the cheese factories showed a marked decline in that only 20 tons of cheese was made representing a value of $5,600 as against 50 tons worth $14,000 for 1911. There is not likely to be any general expansion in the cheese industry before the country is more thickly populated and the dairy herds larger than at present.

HOMOGENIZED MILK.

A new branch of the dairy industry was started during the year when the Laurentia Milk Company of Alberta, Ltd., started three factories for the production of homogenized milk at Red Deer, Bowden and Olds.

II.—CREAMERIES AND CHEESE FACTORIES.

Following are lists of the creameries and cheese factories operated in the province during 1912, showing location and the name and address of the secretary or proprietor of each:

CREAMERIES OPERATED IN ALBERTA 1912.

Name of Creamery	Secretary or Proprietor	P. O. Address
1. Bawlf	J. E. Hansen	Bawlf.
2. O. K. Creamery	O. K. Creamery Co.	Morningside.
3. Beaver Lake Farmers' Creamery Association	J. S. Kavanaugh	Ryley.
4. Duvernay Creamery Association	F. N. Therrien	Duvernay.
5. Laurentia Milk Co. of Alberta, Limited	W. Hamilton	Olds.
6. Innisfail Union B. & C. Mf'g. Association	D. Morkeberg	Innisfail.
7. Markerville Creamery Association	D. Morkeberg	Markerville.

CREAMERIES OPERATED IN ALBERTA 1912.—*Continued.*

Name of Creamery	Secretary or Proprietor	P. O. Address
8. Red Deer B. & C. Mf'g. Association	E. Carswell	Red Deer.
9. Viking Co-operative Creamery Association.	Chas. H. Councilman	Viking.
10. Daysland Creamery Association	W. W. MacGregor	Daysland.
11. Lakeview Creamery Association	Donald Cameron	Lakeview.
12. Neapolis	A. T. Prout	Neapolis.
13. Ferintosh	Hanson & Johnstone	Ferintosh.
14. White Swan	The Laurentia Milk Co. of Alberta, Ltd.	Bowden.
15. Wild Rose	A. Barrett	Ponoka.
16. Bentley	J. F. Millar	Bentley.
17. Golden Rose	The J. Harris Co.	Camrose.
18. Lakeside	The Leduc Produce Co.	Leduc.
19. Mayton	J. H. Cameron	Mayton.
20. Knee Hill	W. T. Nelson	Sunnyslope.
21. Carbon	Blois & Davies	Carbon.
22. Parisian	T. Theodoli	Trochu.
23. Meeting Creek	A. Skalleberg & Co.	Meeting Creek.
24. Pine Lake	Frank T. Edwards	Pine Lake.
25. Laurentia Milk Co. of Alberta, Ltd.	T. B. Millar	Red Deer.
26. Clover Hill	R. LeBlanc	Didsbury.
27. Pincher Creek	McKerricker Bros.	Pincher Creek.
28. Red Lodge	Colin Thomson	Red Lodge.
29. Edmonton City Dairy	Edmonton City Dairy, Ltd.	Edmonton.
30. Lilly Bank	J. E. Cunningham	Vegreville.
31. Lacombe	G. A. Anderson	Lacombe.
32. New Norway	The J. Harris Co.	Camrose.
33. Quarrel	John A. Brown	Quarrel.
34. Elkton	R. H. McNair	Elkton.
35. Black Diamond	Buckler & Gilson	Black Diamond.
36. Calgary Central Cream'y	P. Pallesen	Calgary.
37. Wetaskiwin	Edmonton City Dairy, Ltd.	Wetaskiwin.
38. Morinville	Neo. Beaupre	Morinville.
39. The Carlyle Dairy Co.	Carlyle Bros.	Calgary.
40. Alberta Central Cream'y	W. B. Podmore	Edmonton.
41. Golden Rod	W. N. Morley	Clive.
42. The Cardston Creamery Association	D. S. Beach	Cardston.
43. Riviere Qui Barre	Jos. Poirier	St. Paul des Metis
44. St. Paul des Metis	O. Massicotte	Riviere Qui Barre
45. The High River Creamery Association	Geo. W. Young	High River.
46. The Claresholm Creamery Association	Carl J. Braren	Claresholm.
47. The Macleod Creamery Association	A. G. Stanway	Macleod.
48. The Nanton Creamery Association	Wm. Robertson	Nanton.
49. Seven Persons Creamery Association	A. J. Stockman	Seven Persons.
50. Cochrane Creamery Association	A. E. Stickland	Cochrane.
51. Gleichen Creamery Association	J. T. Johnston	Gleichen.
52. The Sedgewick Creamery Co.	Ira Joy	Sedgewick.
53. C. P. R. Demonstration Farm	W. J. Elliott	Strathmore.

Cheese Factories in Alberta Operated in 1912.

Factory	Proprietor	P. O. Address.
Eckville	The Laurentia Milk Co. of Alberta, Limited T. B. Millar, Gen. Mgr.	Red Deer.
Kunsamo		
Vegreville	Henry Poulin	Vegreville.
Sturgeon River	Napolean Auclair	Lamoureux.
Erskine	Erskine Butter & Cheese Co.	Erskine.
St. Paul des Metis	O. Massicotte	St. Paul des Metis

A comparison of the foregoing lists with those given in my report for 1911 will reveal the fact that eleven (11) creameries did not open, while seven (7) new ones commenced operation in the spring of 1912 and one (1) re-opened after a year's rest.

Two of the cheese factories were unable to re-open owing to lack of milk supply.

In view of the fact that the creamery butter output for the year was 18% greater than that for the preceding twelve months, it may look somewhat curious that as many as eleven creameries—six of which were co-operative—should be unable to re-open last spring.

The reason is to be sought, however, mainly in the changing conditions of our markets. By reason of favourable shipping facilities, many of our largest and most progressive dairymen were able to take advantage of the attractive prices offered by the central dairies that supply the rapidly growing demand for milk and sweet cream in our larger centres of population. They withdrew their patronage from the local creameries and left them in several cases badly crippled and unable to continue in business.

III.—Marketing of Creamery Butter by the Department.

While the department has discontinued the local management and operation of creameries, which was a prominent feature of the work of the dairy branch for a number of years, the marketing service has been continued and is available to any creamery in the province. The record of cream supply, butter output and its selling price, etc., of the "Government Creameries" up to the end of the summer season 1911 will be found in the annual report of the department for that year.

Table I. following shows the quantity of butter marketed through the department's cold storage warehouse at Calgary for the winter season 1911-12, and Table II. is a record of the sales for the summer season 1912.

TABLE I.—SUMMARY OF BUTTER SALES—WINTER SEASON, 1911-12.

Creamery	Pounds of butter shipped	Value at Creamery	Average price at Creamery
			cents
Innisfail	1,500	$ 427.15	28.48
Markerville	2,450	697.69	28.48
Ferry Bank	400	113.91	28.48
Ryley	500	142.39	28.48
Viking	2,850	811.59	28.48
Daysland	1,750	498.35	28.48
Spring Lake	609	173.42	28.48
Neapolis	2,632	749.52	28.48
Total and average	12,691	3,614.02	28.48

TABLE II.—SUMMARY OF BUTTER SALES—SUMMER SEASON, 1912.

Creamery or Shipper	Pounds of butter sold	Value at Creamery	Average price of butter at Creamery
			cents
Nanton Creamery Association	9,400	$2,441.21	25.97
Claresholm Creamery Association	12,080	3,391.85	28.08
D. Morkeberg, Innisfail	20,280	5,608.53	27.65
D. Morkeberg, Markerville	41,368	11,579.10	27.99
Red Deer B. & C. Mf'g. Assoc.	33,130	9,285.35	28.03
John A. Brown, Quarrel	14,384	4,062.74	28.24
Sedgewick Creamery Co.	7,460	1,810.81	24.27
Cochrane Creamery Association	13,950	3,809.60	27.31
Beaver Lake Farmers' Creamery Association, Ryley	24,770	6,802.14	27.46
Viking Co-operative Creamery Ass.	31,728	8,899.79	28.05
R. H. McNair, Elkton	6,300	1,725.49	27.39
A. Skalleberg & Co., Meeting Creek	11,830	3,033.74	25.64
Daysland Creamery Association	4,169	1,096.19	26.29
Lakeview Creamery Association	20,822	5,251.06	25.22
A. T. Prout, Neapolis	4,326	1,080.16	24.97
Totals and average	255,997	69,877.76	27.29

I should add with regard to Table II. that the quantities sold for each creamery does not represent the whole season's make at these points. Some of the creameries made only occasional shipments and others, while shipping to the government cold storage throughout the season, sold locally a considerable proportion of their total make. While the average selling price for the summer season was 27.29 cents per pound of butter at the creameries, the individual prices vary from 28.24 cents to 24.27 cents per pound. The higher prices were realized by creameries that made first class butter and made regular shipments throughout the season. The lower prices were received by creameries that shipped but occasionally when the market price was lowest.

The grade of the butter had also a good deal to do with the variations in the price, in view of the fact that all butter was marketed on the basis of quality.

AGREEMENTS IN MARKETING OF BUTTER.

Following is the text of the agreements entered into between the department and the creameries covering the marketing of butter through the government cold storage. Agreement No. 1 was for creamery associations who had not yet completed the repayment of their loans from the department. No. 2 is used for associations not indebted to the government, and No. 3 for individually operated creameries. It will be noted that the quality principle is made a strong part of the marketing agreement under section No. 1.

(Agreement No. 1.)

MEMORANDUM OF AGREEMENT.

BETWEEN:

THE DAIRY COMMISSIONER, ACTING FOR THE DEPARTMENT OF AGRICULTURE FOR THE PROVINCE OF ALBERTA

and

THE CREAMERY ASSOCIATION, HEREINAFTER CALLED THE ASSOCIATION.

1. The Dairy Commissioner agrees, for the period of one year from April 1, 1912, to market the butter shipped to him by the association for that purpose to the best of his judgment and ability and to pay the association the net proceeds realized from the sales of such butter after deducting:

(1) The average cost of railway freight paid on all butter shipped to him for marketing at Calgary or other point in Alberta.

(2) The cost of packages and other supplies (a) furnished by him to the said association for use in the creamery, or (b) used at the grading station in re-packing butter.

(3) The pro rata cost of handling the butter in cold storage at Calgary or other point until it is finally disposed of.

(4) Any financial loss incurred on account of short weight of, or mold in or on butter so received and marketed.

(5) The charge of one cent per pound of butter manufactured to be applied as follows:

(a) On the repayment of any loan heretofore obtained by the association from the government.

(b) In payment of plant and equipment supplied or which heretofore may have been supplied and installed by the government the property in which said plant and equipment is to remain in the government till it is paid for.

(6) A further charge to be applied:

(a) Towards the payment of an annual rental for the plant and equipment furnished or heretofore furnished by the government reckoned at the rate of three per cent. of such portion of the cost of the plant and equipment as is unpaid, such rental to be computed on the first day of January following the year in which such plant and equipment or any portion thereof is installed, and on each first day of January subsequent thereto (or subsequent to the year in which such plant and equipment has been installed if it has been installed prior to the date hereof) but no deduction shall be made from such rental by reason of the receipt of the whole or any part of the purchase price of such plant and equipment before the end of the year in which the rental is so computed.

(b) Towards the payment of the interest upon loans made by the government upon mortgage security or otherwise.

2. The Dairy Commissioner agrees to grade and classify according to its marketable quality all the butter received by him for disposal during the season of 1912, to pay a premium of two (2) cents per pound on all butter graded as "firsts" and to maintain a uniform standard for grading.

3. The Dairy Commissioner agrees to pay the said association on each shipment of butter received by him from the said association such advances as he may estimate to be about eighty (80) per cent. of its selling value, and to pay the balance due on such sales after the season's butter has been disposed of.

4. The Dairy Commissioner agrees to insure the butter against loss by fire only while contained in the cold storage building at Calgary as trustees for and on behalf of the association to the amount of two-thirds of its estimated market value.

5. The association agrees to employ a properly qualified buttermaker, approved by the Dairy Commissioner, and to accept and carry into effect such directions as the Dairy Commissioner may give from time to time respecting the details of the manufacturing, the packing and the shipping of the butter to be sold by him.

6. The association agrees to use no packages and packing material bearing "Provincial Government Creameries" brand except for creamery butter which is shipped to the Dairy Commissioner or order.

7. The association agrees that all butter shipped by it to the Dairy Commissioner grading below "Seconds" is to be packed and sold in plain packages and any re-packing that may be found necessary at the grading station is to be done at the association's expense.

Dated at......................this..............................day of
..............................A.D. 1912.

Witness: ....
President of the Association.

Witness: ....
Secretary of the Association.

Witness: ....
Dairy Commissioner.

(Agreement No. 2.)

MEMORANDUM OF AGREEMENT.

BETWEEN:

THE DAIRY COMMISSIONER, ACTING FOR THE DEPARTMENT OF AGRICULTURE FOR THE PROVINCE OF ALBERTA

and

.... OF ....ALBERTA, HEREINAFTER CALLED THE ASSOCIATION.

1. The Dairy Commissioner agrees for the period of one year from April 1, 1912, to market the butter received by him from the association for that purpose to the best of his judgment and ability and to pay the association the net proceeds realized from the sales of such butter after deducting:
   - (1) The average cost of railway freight paid on all butter shipped to him for marketing at Calgary or other points in Alberta.
   - (2) The cost of packages and other supplies (a) furnished by him to the said association for use in the creamery, or (b) used at the grading station in re-packing butter.
   - (3) The pro rata cost of handling the butter in cold storage at Calgary or other point until it is finally disposed of.
   - (4) Any financial loss incurred on account of short weight of or mold in or on butter so received and marketed.

2. The Dairy Commissioner agrees to grade and classify according to its marketable quality all the butter received by him for disposal during the season of 1912, to pay a premium of two (2) cents per pound on all butter graded as "Firsts" and to maintain a uniform standard for grading.

3. The Dairy Commissioner agrees to pay the association on each shipment of butter received by him from the association such advances as he may estimate to be about ninety per cent. of its selling value, and to pay the balance due on such sales after the season's butter has been disposed of.

4. The Dairy Commissioner agrees to insure the butter against loss by fire only while contained in the cold storage building at Calgary as trustee for and on behalf of the association to the amount of two-thirds of its estimated market value.

5. The association agrees to employ a properly qualified buttermaker, approved by the Dairy Commissioner, and to accept and carry into effect such directions as the Dairy Commissioner may give from time to time respecting the details of the manufacturing, the packing and the shipping of the butter to be sold by him.

6. The association agrees to use no packages and packing material bearing "Provincial Government Creameries" brand except for creamery butter which is shipped to the Dairy Commissioner or order.

7. The association agrees that all butter shipped by them to the Dairy Commissioner grading below "Seconds" is to be packed and sold in plain packages and any re-packing that may be found necessary at the grading station is to be done at their expense.

Dated at........................this..............................day of ....................A.D. 1912.

Witness: ....

President of the Association.

Witness: ....

Secretary of the Association.

Witness: ....

Dairy Commissioner.

(Agreement No. 3.)

MEMORANDUM OF AGREEMENT.

BETWEEN:

THE DAIRY COMMISSIONER, ACTING FOR THE DEPARTMENT OF AGRICULTURE FOR THE PROVINCE OF ALBERTA

and

.... OF .... ALBERTA.

1. The Dairy Commissioner agrees for the period of one year from April 1, 1912, to market the butter received by him from.................... for that purpose to the best of his judgment and ability and to pay............ the net proceeds realized from the sales of such butter after deducting:
   - (1) The average cost of railway freight paid on all butter shipped to him for marketing at Calgary or other points in Alberta.
   - (2) The cost of packages and other supplies (a) furnished by him to the said.................for use in the creamery, or (b) used at the grading station in re-packing butter.
   - (3) The pro rata cost of handling the butter in cold storage at Calgary or other point until it is finally disposed of.
   - (4) Any financial loss incurred on account of short weight of, or mold in or on butter so received and marketed.

2. The Dairy Commissioner agrees to grade and classify according to its marketable quality all the butter received by him for disposal during the season of 1912, to pay a premium of two (2) cents per pound on all butter graded as "Firsts" and to maintain a uniform standard for grading.

3. The Dairy Commissioner agrees to pay.....................on each shipment of butter received by him from................such advances as he may estimate to be about ninety per cent. of its selling value, and to pay the balance due on such sales after the season's butter has been disposed of.

4. The Dairy Commissioner agrees to insure the butter against loss by fire only while contained in the cold storage building at Calgary as trustees for and on behalf of..................to the amount of two-thirds of its estimated market value.

5. ....agrees to employ a properly qualified buttermaker, approved by the Dairy Commissioner, and to accept and carry into effect such directions as the Dairy Commissioner may give from time to time respecting the details of the manufacturing, the packing and the shipping of the butter to be sold by him.

6. ....agrees to use no packages and packing material

bearing "Provincial Government Creameries" brand except for creamery butter which is shipped to the Dairy Commissioner or order.

7. ....agrees that all butter shipped by him to the Dairy Commissioner grading below "Seconds" is to be packed and sold in plain packages and any re-packing that may be found necessary at the grading station is to be done at his expense.

Dated at..........................this..............................day of ....................A.D. 1912.

Witness: ....
Witness: ....
Dairy Commissioner.

IV.—EDUCATIONAL BUTTER SCORING CONTEST.

An effort was made in the early part of the season to interest the Alberta creameries in this contest and the following letter was mailed to the local management of each:

EDUCATIONAL BUTTER SCORING CONTEST, ALBERTA.

Dear Sir,—

The scope of the "Educational Butter Scoring Contest" heretofore carried on by the department in connection with the government creameries will be extended to all creameries in the province for the season of 1912.

The main objects of the contest have been to help the buttermakers in their work from week to week by pointing out where and how improvements might be profitably made in the quality (flavor) and workmanship (texture, color, finish, etc.,) of their butter output and to promote a spirit of friendly emulation among the participating creamery organizations, as to who could do the best work and turn out the most valuable product.

The contest has been conducted by the department during the past five summer seasons and resulted in a gratifying improvement in the quality and in the workmanship of the butter made in the creameries.

The contest involves a close, expert examination of the flavor, texture, color, salting, finish and weight of representative packages of butter from each churning made at a creamery throughout the season. The result of this examination is expressed in comparative figures upon a score card and the principal defects found in each package are noted. A copy of the score card is mailed to the shipper of the butter immediately upon the completion of the week's scoring and helpful suggestions given as to means of correcting the more serious defects found. Comparative weekly score summaries are also furnished, showing the relative standing of all the creameries and other interesting and useful particulars.

PACKING AND SHIPPING OF BUTTER FOR CONTEST.

One 14lb. box, solid pack, is to be put up from each churning and, for identification purposes, plainly marked with name of the creamery and the serial number of the churning. A shipping report, covering each shipment is to be made in triplicate so as to give full particulars as to date and serial number of the churnings from which the samples were put up, churning temperature of cream and other details. The samples are to be shipped by freight to the government cold storage, Calgary, on regular butter shipping days throughout the season. The shipping report, in triplicate, together with original clear bill of lading covering the butter shipped is to be promptly mailed to the Dairy Commissioner who will furnish blank forms and other information desired concerning the contest.

DISPOSAL OF THE BUTTER.

The butter shipped to the scoring contest may, at the option of the shipper, be sold to best advantage by the Dairy Commissioner who will remit in full the revenue less freight charges advanced, if any, or the butter may be delivered to the order of the shipper upon the payment of inward transportation charges, if any, advanced by the Commissioner.

PRIZES.

While the contest is, in itself, an educational feature of great interest and value to the creameries and buttermakers who will take advantage of it there will be a number of premiums awarded in connection with it. In addition to special cash and other prizes that may later on be offered from other sources for monthly or district competitions the Department of Agriculture offers the following prizes in the 1912 contest, viz.: A handsome trophy for the creamery and a gold medal, suitably inscribed, for the buttermaker having the highest average score for the season, and silver medals, suitably engraved, for the buttermakers of the following "best third" of the participating creameries.

Faithfully yours,
C. MARKER,
Dairy Commissioner.

Following are copies of score card and shipping report enclosed in the letter:

PROVINCE OF ALBERTA
DEPARTMENT OF AGRICULTURE

Office of the Dairy Commissioner
C. MARKER, Dairy Commissioner, Calgary

BUTTER SCORE CARD

	Marks on Packages--letter								Details and Reference Numbers									
									Of Defects		To Score							
	1	2	3	4	5	6	7	8			1	2	3	4	5	6	7	8
Flavour--45									Flat	1								
									Heated	2								
									Weedy	3								
									Sour	4								
									Bitter									
									Stale	6								
									Metallic	7								
Texture--25									Salvey	8								
									Brittle	9								
									Weak	10								
									Milky Brine	11								
Salting--10									Too Light	12								
									Too Heavy	13								
									Undissolved	14								
Colour--10									Too Light	15								
									Too High	16								
									Mottled	17								
									Uneven	18								
									WhiteSpecks	19								
Package--10									Poorly P'k'd	20								
									" Prin'td	21								
									" Wr'p'd	22								
									" Nailed	23								
									Dirty	24								
									Poor Finish	25								
Total--100																		
Date:																		
By:																		
Check Weight																		

GENERAL REMARKS :

PROVINCE OF ALBERTA

Department of Agriculture—Dairy Commissioner's Branch

EDUCATIONAL BUTTER SCORING CONTEST

SHIPPED from..(Name of Creamery)..to Government Cold Storage, Calgary

Date...........Refrigerator Car No.......Shipping Weight...........lbs.

CHURNING				No. of PACKAGES						Grading at Creamery		Score at Calgary Date...........		
Date	Temp.		Mark	56	2	14	50	40	20	Crm.	But.	Flavor 45	Pounds	
	Crm.	w.wat											Grade 1	Grade 2
May 2	58	48	1			1				A	A			
May 2	60	46	2			1				B	B			
May 4	58	50	3			1				A	A			
May 4	57	49	4			1				B	A			
Number of Packages						4								
Total net weight, lbs.						56								

REMARKS:

Deliver this butter to...............upon the payment of freight charges advanced, if any, and send...
(a) copy of this report with score card complete; or
(b) scores of the churnings indicated in left margin.

....
Shipper.

This is to certify that the contents of each package included in this shipment is true to churning numbers marked thereon.

....
Received and Checked.

.... (Signature) ....
Buttermaker

On..................191

NOTE.—This report to be made and forwarded in triplicate at the time of shipment.

SHIPPING REPORT.

(1) This form is to be filled out so as to give accurate information of every churning represented in the shipment (see other side), viz.: the date, and the temperatures of the cream and wash water of each churning (these temperatures have an important bearing upon exhaustive churning and upon the texture and keeping quality of the butter); marks on packages ("serial churning numbers"); number of boxes of each size; grading of cream and butter at the creamery; total number of packages in shipment and total net and shipping weights. The shipping report, in triplicate, is to be forwarded promptly to the Dairy Commissioner together with the original clear bill of lading covering the shipment. Endorsements on the bill of lading such as "shipper's count" or "more, less" should not be accepted, otherwise the shipper accepts the responsibility of any shortage that may occur in transit.

(2) Packing and marking of butter boxes: After each box is lined with properly prepared parchment paper its weight should be taken and 14¼ ℔s. of butter packed into each 14℔. box. The name or "letter" of the creamery, the "serial churning number" and the shipping mark, "C. M., Calgary," must be plainly and neatly stamped on each box, also on the sack enclosing it so that particulars may be seen without removing the sack.

(3) The flavor of the cream in the vat and used for the individual churnings should be examined carefully and the grade recorded in column II. of the shipping report, using the letters "A," "B" and "C" to express "choice," "fair" and "poor" respectively with the addition of a key-number which stands for the specific defects found as marked in the attached copy of butter score card under the heading of flavor. If, for instance, a churning of cream is considered only fair because it is weedy in flavor it should be graded "B3," if the cream for a certain churning is very sour and stale in flavor the grade would be "C46," and so on. The grades of the butter may be recorded in a similar manner in column 12 and if desired the score for flavor may be recorded as well.

(4) A complete score and summary of grading of each week's shipments of butter to the government cold storage, Calgary, will be mailed to the shippers from week to week.

Dairy Commissioner's Office, Calgary, May 3, 1912.

Twenty-two creameries entered in the Butter Scoring Contest, fifteen for the whole operating season and seven from time to time.

The winners of the prizes offered by the department, were:

J. J. Skalitzky........	Viking..............	Trophy and Gold Medal
M. L. Campbell.......	Red Deer............	Silver Medal
W. H. Jackson........	Markerville..........	" "
Wm. Hansen..........	Innisfail.............	" "
John A. Brown.......	Quarrel.............	" "

V.—COMMERCIAL GRADING OF CREAMERY BUTTER.

On May 21st. a further communication was addressed to the managers of the creameries, reading as follows:

Calgary, May 21, 1912.

Dear Sir,—

On the 6th. inst. we wrote you a letter on the subject of the Educational Butter Scoring Contest for the season of 1912 and invited you to join. While we have as yet received no intimation from you as to whether you will participate in the contest we believe that the proposition is worthy of your favorable consideration.

The contest for the prizes offered by the department will commence on June 1st. and continue up to the middle of October. The creameries joining the contest will ship by freight to the government cold storage at Calgary on regular butter shipping days one package from every churning of butter made during the operating season or between the dates specified, as explained in our former letter. The 14℔. boxes can be bought from the people who are now supplying you with butter packages.

Apart from the competitive and educational features of the scoring contest there is to be another side to it this year. A short time ago a firm who is engaged in the wholesale produce business in this city asked us as to whether the department would undertake to grade the creamery butter shipped into this market and stated that if uniform grade standards could be established and the grading done by a disinterested party it was practically certain that the wholesale produce merchants would buy and pay for butter strictly according to quality.

In view of the success which had attended the work of the department in co-operation with the trade and with a number of creameries along this line during the past two seasons it was felt that the interests of the patrons, the creamery operators, the buyers and the consumers of creamery butter could be well served by the extension and general application of the grading and quality payment principal, both as between the buyers and the creameries and as between the creameries and their patrons.

A meeting was held a few days ago for the discussion of the matter with the wholesale buyers of Calgary. The following firms were represented at the meeting, viz:—P. Burns & Co., Ltd.; The Swift Canadian Co., Ltd.; Campbell & Griffin, Ltd.; Plunkett & Savage, and P. Pallesen.

At this meeting the writer submitted a plan whereby the department could and would gladly co-operate with the creameries and with the trade in the establishment of grade standards for creamery butter and whereby the grading of the butter from individual creameries could be done largely in conjunction with the Educational Butter Scoring Contest. This plan was also laid before a meeting of wholesale produce buyers at Edmonton on the 15th. inst. The firms of The Edmonton Produce Co., and The Swift Canadian Co. Ltd. were represented at the meeting.

The details of the plan received the unanimous endorsation of both meetings and we have every reason to believe that all the principal wholesale buyers of Alberta creamery butter will after June 1st. buy on the basis of grade, paying a higher price for high grade than for low grade butter. We regard this as a very important step in the right direction and feel that the quality creameries as well as the trade generally will hail a move of that kind with pleasure and satisfaction.

Following is the plan according to which the commercial grading of butter can be done in conjunction with the Educational Butter Scoring Contest conducted by the department:

I. Each participating creamery or shipper:
   (1) Will use a separate, serial churning number for each churning of butter throughout the season;
   (2) Will write or stamp plainly and legibly in addition to the name of the creamery or of its owner, the same number on all packages put up from the same churning and give on the shipping report all details required concerning each shipment of butter;
   (3) Will give the department signed instructions on the shipping report, covering the scoring samples, with regard to the disposal of the samples; also name the buyer, person or firm, to whom score records of the samples are to be sent by the department.

   Suggestion:—Keep a small sample of butter from each churning for comparison with grade and score reports from the department and from the trade. Such samples should be kept in a cold place and in containers bearing their individual churning numbers for the purpose of identification.

II. The department:
   (1) Will score the samples upon arrival at the government cold storage or other point that may be specially designated later, mail as soon as possible thereafter to each shipper a complete report, score card and summary of scores for the week;
   (2) Will furnish score records to any buyer upon the signed order of the shipper, it being assumed that the churnings and churning numbers of the samples and of the main shipments are always identical;

   Note: The department's grades will necessarily be based upon the score of the samples sent in to the scoring contest, but the commercial grades of the main shipments to the trade may be determined both by the department's scores of the corresponding samples and by the general condition of the main shipments as at the time of receipt. Poor workmanship on the part of the buttermaker is often responsible for otherwise good butter, i. e. good flavored butter, being placed in lower grades and poor storage facilities at a creamery may also be responsible for rapid and marked deterioration in the quality of butter stored, even for a short time. It is to be understood that in all cases the score of any butter, particularly for flavor, shall relate only to the condition of the butter actually scored and as at the time of scoring;

   (3) Will not place grade on butter which shows mold or mustiness, in appearance or in flavor (See circular "Mold on Butter," May 13, 1912.)

III. The buyer:
   (1) Will inspect weight, workmanship and general condition of the butter and of the packages in the main shipment;
   (2) Will base grades on the department's scores and upon the general condition of the butter in the main shipments as at the time of receipt (See note under "The Department.")

In offering the service involved in carrying out the plan just outlined the department believes that the creameries of Alberta and the buyers of creamery butter can get together on a practicable scheme for marketing butter on a quality basis, which is the only logical and just basis for each party, and the extent to which these parties will take advantage of this assistance remains with themselves.

In order to assist you to prepare for the new order of things and assuming that you are quite as willing to sell as the trade will be to buy on a strictly quality basis, we attach specimen shipping report with typewritten suggestions on the back and under separate cover we mail you one dozen copies of Form D 2 so you may from the start be ready to meet the requirements of the people to whom you may sell your butter on a grade basis.

We are forwarding also six copies of the same form adapted to, and to be used only in connection with the Educational Butter Scoring Contest as directed on the specimen copy attached to our letter to you of the 6th. inst. A further supply of these forms will be furnished upon application.

The Educational Butter Scoring Contest in conjunction with our advisory and expert field service should render valuable help to the participating creameries who may need it. In our efforts to promote the interests of dairying, and that means the interests of all who are connected with it, we should all work towards the attainable ideal: "All as good as the best."

A copy of this communication is being mailed to the principal produce merchants and to the management of all the creameries in the province.

Faithfully yours,
C. MARKER,
Dairy Commissioner.

The service thus offered was not used by the creamery operators who marketed their butter themselves to the extent we had expected. This is, in a way, a matter for congratulation as it goes to show that both the quality and the price of the product has been satisfactory to buyer and seller alike. They are, after all, the principal parties interested.

It is quite possible, however, that market conditions may develop in the near future which will make a service such as we have here outlined with or without modifications, both desirable and acceptable to those who are immediately concerned.

VI.—CONVENTION OF CREAMERY DELEGATES.

The Annual Creamery Delegates' Convention was held at Red Deer, April 4th and 5th. It was called for the purpose of presenting reports and addresses and for the discussions of dairy matters generally such as markets, quality basis payment for cream and butter, creamery inspection and instruction and dairy herd management. Special attention was given to the question "How can we best encourage and promote the dairy industry in the several sections of our province."

Acting upon the invitation issued by the department, the following creameries were represented at the convention:

The Innisfail Association, by	**J. R. Moore, President.**
The Markerville Association, by	**D. Morkeberg, Secretary-Treas.**
The Lakeview Association, by	**Wm. Graham, President.**
The Spring Lake Association, by	**Henry Eshpeter, Director.**
The Cardston Association, by	**D. S. Beach, Secretary-Treasurer.**
The Red Deer Association, by	**James Comer, President. E. Carswell, Secretary-Treasurer**
The Blackfalds Association, by	**Jas. McNicol, Secretary-Treas. H. A. Gracey, Buttermaker.**
The Rimbey Association, by	**J. H. Beeley, Secretary-Treasurer**
The Beaver Lake Association, by	**B. M. Bendikcon, President.**
The Viking Association, by	**J. J. Skalitzky, Buttermaker.**
The Nanton Association, by	**J. J. Duggan, President.**
The Ferrybank Association, by	**E. W. Parker, Buttermaker.**
The Bawlf Creamery, by	**J. E. Hansen, Proprietor.**
The Trimble Creamery, by	**H. W. Trimble, Proprietor.**
The Alberta Central Creamery, Edmonton, by	**W. B. Podmore, Proprietor.**
The Pine Lake Creamery, by	**F. T. Edwards, Proprietor.**
The Neapolis Creamery, by	**A. T. Prout, Proprietor.**
The Golden Rose Creamery, Camrose, by	**F. Pratt, Buttermaker.**
The Red Lodge Creamery, by	**Colin Thomson, Proprietor.**
The Quarrel Creamery, by	**J. A. Brown, Proprietor.**
The Calgary Central Creamery, by	**P. Pallesen, Proprietor.**
The Clive Creamery, by	**T. A. Brereton, Proprietor.**
The Vegreville Creamery, by	**J. E. Cunningham, Proprietor.**
The Pincher Creek Creamery, by	**W. R. McKerricker, Proprietor.**
The St. Paul de Metis Creamery, by	**Omer Massicotte, Proprietor.**

The following representatives of the Department of Agriculture were in attendance: George Harcourt, Deputy Minister; C. Marker, Dairy Commissioner; H. S. Pearson and Geo. W. Scott, Dairy Inspectors; and G. H. Hutton, Superintendent of the Dominion Experimental Station at Lacombe.

The produce trade was represented by Mr. A. S. Duclos of the Edmonton Produce Company; Mr. L. Lambert and Mr. C. G. Sanford of the Swift Canadian Company.

The principal daily and agricultural journals circulated throughout the province were represented at the convention, and excellent reports were given in a number of publications of its proceedings.

In a report of the proceedings of the convention much matter must necessarily be omitted especially such as be of momentary or individual interest only. Some of the principal addresses are recorded here according to the manuscript furnished by the speakers; others are reported more briefly yet keeping in view the salient points made.

Mr. George Harcourt, Deputy Minister of Agriculture, occupied the chair at the initial session and on behalf of the department welcomed the delegates. He pointed out that conventions such as this were intended to be a clearing house for information on dairy topics. He invited the delegates present to get the greatest practical benefits out of it by a free discussion of the various phases of the industry that might be presented by the speakers, the department or by the delegates themselves.

C. Marker, Dairy Commissioner, was then asked to present a review of the dairy industry of the province for the past year. In doing so he used some of the statistical material and subject matter given in the dairy section of the report of the department of agriculture for 1911, and need not be repeated here. He pointed out that the extension of the department's marketing service had evidently met with the approval of the creameries as eight (8) new ones availed themselves of it. He pointed out that in trying to secure and hold good markets, the department was in exactly the same position as any other commercial agency, that regular supply of the right quality of goods was essential for best results. He stated that seventy (70) per cent. of the butter marketed through the department during the year was made in the three months—June, July and August, when the price is generally lowest. He urged a more even distribution of the year's production so as to have something to sell when the market is comparatively short and prices good. He was well aware that it is not an easy matter to change the present short season of production to cover a much greater period of the year, though it would undoubtedly be found profitable.

Such a change will demand fairly good feeding and care of the dairy cow, and he was particularly pleased to say that Mr. Hutton, the Superintendent of the Dominion Experimental Station at Lacombe, would address the convention a little later on upon this very important subject. Mr. Hutton is an enthusiastic dairyman and is regarded as one of our best authorities.

The commissioner referred to the continued success of the cream and butter grading system adopted by the department in co-operation with a number of creameries in 1910. He was strongly of the opinion that a creamery selling butter in a "quality" market was not doing justice to the best of the patrons unless it, in return, provided them with a quality market. When the patrons are given a quality market for their cream, they will soon take advantage of the educational facilities available through various channels.

Each creamery has two principal points of contact, its patrons on the one hand and its markets on the other. From his experience as to the working out of the grading system, the speaker had no hesitation in saying that the general adoption of that system by all the creameries will mean not only additional revenue to our farmers and creamery men, but also greater prestige for our products in the best markets and more satisfaction to the consuming public, who pay the price in the markets that are really worth catering to. Thus we may lay a deeper and more enduring foundation for future expansion.

So much having been said about the indifferent creamery patron, the speaker said that he had come to the conclusion that the "indifferent" patron, as such, is very largely a product of our creamery system. So long as creameries continue to pay the same price for butterfat in cream, irrespective of the condition of the cream, so long will they have poorly cared for cream and indifferent patrons. They simply put a premium on indifference. The wonder of it is that there is not more of it.

As to whether any individual creamery ought to take up, and follow, the grading and premium system is a question, in the speaker's judgment, for the quality patrons to decide, as they are in most cases in the majority. If and when they choose to assert their right the reform must come sooner or later in proportion, as their demands are unanimous and sustained. So long, however, that they are satisfied to share the losses resulting from careless methods on the part of the indifferent patrons, there is perhaps no one who has a right to deny them the privilege.

In the discussion which followed, a number of the delegates expressed themselves as entirely satisfied with the results of the system of quality payment at their own creameries. They had succeeded in converting many indifferent patrons into quality producers, and on the other hand, they had succeeded in getting better market prices than ever before for the butter that they had to sell.

Mr. Duclos, of the Edmonton Produce Company, addressed the convention as representative of the produce trade. He endorsed the principle of quality basis payment for dairy and other products, in fact he considered it a most important factor in the marketing of products. The grading should begin with the cream brought into the factory and the patron should be paid on the basis of actual value.

In his opinion three grades of cream should be established, namely, Extra First, First and Second. Cream that would not qualify for second grade should not be accepted, and second grade cream should be accepted not more than two or three times in a season from any one patron. He also thought that the different grades of cream should be kept separate at the creameries and separate churnings made from each, according to their grade. By doing this the buttermaker would turn out an extra first butter, Number One and Number Two, and he would receive payment according to these values from the trade.

Speaking of marketing, Mr. Duclos emphasized the necessity of having the butter put up in neat, clean packages and the use of the best quality parchment paper for lining the boxes and for wrapping the one-pound prints. He advised the creameries to adopt registered brands or trade marks and sell their butter under such brands or marks. The brand should be stamped on each box and would serve as a mark of distinction in the market besides being the means of inspiring the buttermaker to keep up the standard of quality of his brand. He also called for proper weights and said that each fifty-six pound box should have a pound above its actual marked weight. He explained that by the time most of the butter was placed on the ultimate market, considerable evaporation of moisture had taken place and this always means a loss of weight to the contents of each package.

For the general market Mr. Duclos recommended the buttermakers to pack their butter in fifty-six pound boxes, as the contents of the larger package kept its good flavor longer than that of smaller packages, other conditions being equal. It was more convenient to the dealer to cut the larger packages into one pound prints if the trade should demand that style of package rather than the original package. It would also save labor at the factory, as well as in the future handling of the butter. Of course the smaller packages such as the 28's and 14lb. boxes, should be put up when there was special demand for the butter in that form. Concerning the marketing of butter, Mr. Duclos was of the opinion that all the creamery butter production should be marketed on one or two butter boards established in the province, perhaps one at Calgary and one at Edmonton, as he considered that the marketing on butter boards established the true standards of value, and all butter is bought and paid for according to its quality.

Mr. Duclos referred to the fact that some 200 carloads of eastern butter had been shipped into the western provinces during the year past. He promised the dairymen of the province that if they would produce the quality and the quantity required by the markets the Alberta produce man would take the responsibility of doing the marketing for them and thus keep thousands of dollars at home.

In closing Mr. Duclos spoke of the good work that had been done by the Provincial Dairy School at St. Hyacinthe in the training of butter and cheese makers, and he hoped that before long Alberta would establish a similar school, believing that such an institution would do more than any other single agency towards dairy development along right lines. He thought, also, that the dairy instruction and inspection service should be so enlarged that visits could be made to the homes of the individual dairymen in any part of the province.

EVENING SESSION.

The evening session took the form of a public meeting in the assembly room of the public school, which was kindly placed at our disposal by the school board.

His worship, Mayor Welliver, occupied the chair, and in a brief address welcomed the convention to the town of Red Deer. He said that the town council and the board of trade at Red Deer wished officially to note the occasion and entertain the visiting delegates. They had come to the conclusion that the most acceptable entertainment would be a visit to some of the dairy farms and herds of the district. Arrangements had been made for a number of motor cars to take the delegates out the following morning.

His worship said that the dairy industry had been a very important factor in the development of the Red Deer district and he hoped that the visiting dairymen would carry away with them pleasant recollections of their visit here.

Publicity Commissioner J. R. Davison also spoke entertainingly with regard to the great development that had taken place in central Alberta during recent years and this he accounted for largely by the extension of the dairy industry, which was so well exemplified in Red Deer. He referred to the fact that the Red Deer district had probably a larger number of pure bred dairy stock than any similar territory to be found in Alberta. He stated that in the course of the next few weeks, a number of important industries would be established at Red Deer and among them two or three that would afford the farmers of the district additional and alternative markets for their milk.

At the conclusion of Mr. Davison's speech, Mr. Geo. Harcourt, Deputy Minister of Agriculture, was invited to address the convention upon a subject which comes very close to most people.

Before commencing his address, Mr. Harcourt expressed regrets at the Minister of Agriculture being unable to be present at the convention and read a telegram that had just been received from Hon. Mr Marshall at Toronto:

> "Regret absence from convention. Tell delegates I am absent arranging shipment of dairy cows to help their business. Department also pleased to give all possible assistance in marketing dairy products for all creameries in Alberta. Also will have better dairy instruction in agricultural schools in the near future. Best wishes for successful meeting."

Following is the text of Mr. Harcourt's address:

NEGLECTED OPPORTUNITIES.

It may be stated that most of us are here because of the opportunities to regain health or amass wealth. It is a well-known fact that the climate of Alberta is very favourable to those suffering from pulmonary troubles, but it is not to this opportunity, valuable as it is, that it is desired to call attention; neither is it the intention to dwell on the fact that for thousands of years nature has been accumulating an amazing store of fertility in the virgin soils of the prairies and park lands of Alberta; nor is it the desire to undervalue the other fact that with a minimum of labor the veriest tyro at farming may convert this store of fertility into wealth in actual cash. Men have recognized this opportunity as one of a lifetime and wide awake men are scrambling after land in a mad rush. In such great haste are they bending every effort to bring an ever increasing area under grain that there is grave danger of them overlooking or forgetting the numerous other opportunities to acquire wealth that are knocking at their very doors.

Without doubt it is advisable that every beginner profits in large measure from the wealth nature has stored for him, but it would seem that there comes a time when he must seriously consider the wisdom of having all his eggs in one basket, as the present craze for extended wheat areas may be rightly described. Surely the past two seasons may be taken as indicating the folly of such a course and pointing to the necessity for more diversified farming.

If, then, a farmer wishes to diversify his work, what avenues are open to him? The object of this paper will be to direct attention to some of such lines of work. They are quite numerous and anyone may choose one or more, or a combination, such as meets with his individual tastes. Through the breaking up of the large ranches the live stock industry of the province is in a transition stage at the present time, and therefore to the observant man presents many openings for successful work.

HORSES.

One of the greatest opportunities ever presented to horse lovers is offered at the present time. Generally speaking, Alberta possesses an ideal climate and soil for raising a high quality horse of great stamina and soundness of wind and limb. With the breaking up of the large horse ranches the supply of saleable stock must now come from the farms or be brougnt in from outside the province. Already importations have been brought in. The farmers of the Brandon district in addition to growing their usual acreage of grain raised and sold last year about $400,000 worth of horses, most of which came to Alberta.

Prices are high at present, but there does not appear to be any satisfactory reason why they should not go higher still. When one considers the enormous amount of railway construction now under way and to be built in the near future (for we are only beginning to build railways), the requirements to meet the demands of the new settlers coming in by the thousands every week, the supply needed by the rapidly growing towns and cities, the number necessary to fully stock the farms and bring the land under cultivation; and, when one realizes that not more than three per cent. of land in the province suitable for growing grain is now under cultivation, and that lying to the west, north and east of the capital of the province there is an area still to settle, capable of growing grain, as large as that now only partially settled between the Rocky Mountains and Winnipeg, it would seem that a slump in values cannot occur in the near future. It is manifestly apparent that the price of horses will maintain a high level for many years—long enough anyhow for many men to engage in the business and to derive good returns before there is any prospect of a slackening in demand. If a man cannot buy a nice bunch of breeding mares, buy a few weaned fillies this fall and grow them. They will make money faster than many a lot in some outside subdivision.

CATTLE.

Much of the above is also applicable to the cattle situation. It is generally admitted that there are not many more than half the number of cattle in the province to-day that there were five years ago. The last census of the United States shows that there is approximately ten million fewer head of cattle and twenty million more people than there were ten years ago. The fact is we are fast running behind in the supply of beef cattle and it would be the part of wisdom for every one to stock up as rapidly as possible. There is a paying harvest for the man who does. The regrettable feature of the situation is that with the breaking up of the ranges the she-stock has been sold to the butchers, and it will in consequence take years to re-establish the old numbers of breeding stock. Aim to increase the number of your breeding stock. If you haven't got them decide to invest in as many as you can—buy weaned calves in the fall and grow them, and do not forget that the first winter is the making of them. Buy either heifers or steers as you intend to go in for breeding stock or growing beef steers.

It has been amply demonstrated at the Dominion Experimental Farm at Lacombe and at the Provincial Demonstration Farms at Claresholm, Olds and Vermillion, that feeding a bunch of steers is profitable work for the winter. But unless some one grows the calves, where are the steers to come from? There is thus room for two industries—one to grow the calves into steers, and a second to fatten or finish them. The outlook for this work is bright for high prices must prevail until the country catches up. The supply is so far behind, settlement taking place so rapidly and population increasing the mouths to eat as fast that it will be many years before values fall to the old time prices.

What has made the states of Illinois and Iowa so famous? It is the numbers of steers from the western ranges that are fed every winter, enriching the farms as well as the pockets of the feeders. Alberta can grow an abundance of feed; her dry steady winter climate permits of feeding in the open at little expense and there is no valid reason why many farmers should not engage with profit in the winter feeding of a bunch of steers. Get into the game.

SHEEP.

The sheep industry has been sadly neglected. When the housewife asks for lamb or mutton and is served with frozen or chilled goods from Australia and New Zealand, there surely is something wrong. There is no better or quicker money-maker on the farm, and many a nice flock could be maintained. As soil packers on the summer fallow and scavengers of waste places to keep down weeds there is nothing to equal our fleecy friend. Fencing enters into the problem it is true, but the gain to be made on what would otherwise be lost, will soon meet the cost of fencing. They are deserving of more careful trial than they have had.

SWINE.

Much the same story as with sheep may be told about hogs. They give quick returns for the money invested, and properly handled are real mortgage lifters. Some years ago when prices were low, many farmers stopped raising hogs. There was no money in it they said. Nevertheless, those farmers who continued raising a nice bunch of hogs each year have been receiving good paying prices while those who did not have been the losers thereby.

The recent census returns show that the population of the province has increased slightly over 102 per cent. during the past five years, but the interesting point is that the population of the towns and cities has been increasing much more rapidly than that of the rural districts. Then, as many men have quit growing hogs for sale, the number of hogs marketed is not increasing as rapidly as it should. There is thus an increasing number of consumers and less increasing supply. This is borne out by the actual situation as the packers have to bring in from outside the province large supplies to meet local demands. There is surely something wrong when such a condition exists, or there must be some truth in the contention of some farmers that hog raising does not pay. Shut up in filthy pens and fed expensive grains as many hogs are, it is not surprising that they make their owners no money. This is not the fault of the animal but of its owner. Give the pig a chance with suitable pasture runs, feeds and yards and he will soon demonstrate that growing him is a lucrative business for his owner. In addition to the local market there is an excellent one in the mining and lumbering camps of the province to the west. Prices have ruled high for a number of years and a survey of the situation shows no satisfactory reason why a further period of comparatively high values should not continue. Expensive housing is unnecessary. Damaged and unsaleable grain can be converted into a high class product and good money made handling our porcine friend if this neglected opportunity is seized aright.

POULTRY.

The dry climate of the province is very favourable for poultry raising. The cold of the winter is not to be feared, as it has been shown time and again in all parts of the province that birds can be successfully handled in very cheaply constructed houses. The province is importing in round numbers about $400,000 worth of eggs and poultry products. The industry has made wonderful strides during the last few years, but it is not keeping pace with the demand. Then there is a large and growing market in the province to the west of us always hungry for our surplus products.

To the farmer who will persist in growing grain exclusively or he who does not care for the larger domestic animals, the industrious hen is recommended. She will convert his unsaleable grain into a marketable product and give him a revenue when his land is idle. It is easy to start in this line of work—and the returns are quick and highly profitable. It will never be overdone and the market will always be good for high quality products. It certainly is a neglected opportunity on many a farm.

DAIRYING.

Of all the various lines of work on the farm, dairying makes the most demands on a man's time. "Tied to a cow's tail" aptly describes the situation. Yet it is because of this very fact, dairying is one of the best money making lines of work. Population has increased so much faster than the production of milk and butter that the former has reached a very high price, and will soon be too expensive for poor people. Carloads of the butter have to be imported to supply the demand. Last winter Calgary milk dealers were paying $2.40 per hundred for milk delivered and at Edmonton $2.40 to $2.30, and then were not able to meet the demand, while the very highest price paid to the Ontario farmer and then only for a short time was $1.75 to $1.85 per hundred delivered in Toronto. If the Ontario farmer can make money selling milk at the above prices, (and he has been selling for much less in past years), the Alberta farmer should coin money at the prices he receives. He can grow feed more cheaply than his Ontario cousin and his stabling need not cost him any more. It is a splendid opportunity for the industrious man, and will continue to be for many years until men get over their foolish objection to "pulling teats." Unless more engage in the business, prices of milk to city customers will become prohibitive.

VEGETABLES.

Did you ever see a finer display of vegetables than is to be seen at any fall fair? Our climate is exceedingly favourable to the growth and development of all kinds of vegetables. Every one knows that. But who is taking advantage of it? Do you know that turnips and carrots are worth 50 cents a bushel by the carload and that supplies have to be brought in from Ontario and British Columbia? It is a fact. We do not grow enough of the things that grow to such perfection to supply our own demands. It is the same with potatoes. Our soil will grow the very finest of dry potatoes, but we import them by the carload. Then it is difficult to find anything but a soggy wet potato among the home grown article for sale. Why? Because we are so busy sowing a large acreage of grain that we haven't time to plant the potatoes early enough so that they may ripen before the frost catches them in the fall. There is an opportunity along these lines that will bear investigation by the interested man.

FRUITS.

Strawberries, raspberries, currants and gooseberries grow wild in profusion all over the country, and where the wild ones grow the tame varieties will succeed well. A few farmers are starting small plots but there is an opportunity here that few see, but one which does offer golden opportunities to those who care for this line of work.

CONCLUSION.

Attention has been called to opportunities along a number of lines of farm work that offer an opening for development. There are others. Look about and consider the market demands for all kinds of farm products. Remember that the consuming population in this province and the adjoining ones too is increasing more rapidly than the producing; that railway construction has only begun so far as this province is concerned and that the province is exceedingly rich in mineral wealth and that the mining industry is only in its infancy. This all means continually expanding markets for all kinds of farm produce. When our own markets are supplied there is another equally as good to the west of us, a province rich in mineral and forest wealth and limited in its ability to produce agricultural products. The opening up of British Columbia with railroads spells opportunity with big letters to the farmers of Alberta.

With assured markets for all kinds of farm products and with the soil and climate to grow these products of high quality in abundance, what more can a man ask? There is to-day a most inviting opportunity for every farmer in the land to break away from exclusive grain growing and engge in more diversified farming.

At the conclusion of his address, Mr. Harcourt presented the prizes which had been awarded by the department in the 1911 Educational Butter Scoring Contest, with appropriate and commendatory remarks to the winners, who were:

J. J. Skalitzky	Viking	Trophy and Gold Medal
D. Morkeberg	Markerville	Silver Medal
M. L. Campbell	Red Deer	" "
A. A. Munro	Rimbey	" "
John A. Brown	Quarrel	" "
E. H. Mills	Conjuring Creek	" "
Wm. Hansen	Spring Lake	" "

BREEDING AND MANAGEMENT OF DAIRY CATTLE.

This subject was dealt with by Mr. G. H. Hutton, Superintendent of the Dominion Experimental Station at Lacombe. He said:

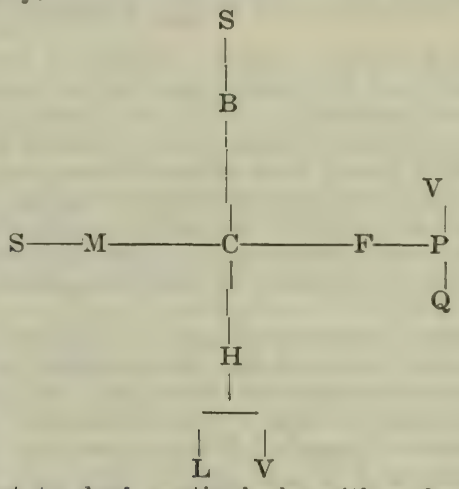
"Mr. Marker asked me to be present and speak to the Dairy Convention on the question of breeding dairy cattle and also in respect to the management of a dairy herd. I am pleased to do what I may for the advancement of the dairy industry and in fact of all branches of the live stock work in this province. I firmly believe that live stock has a permanent place in the agriculture of Alberta, that its place in that agriculture will be continually enlarged until finally the live stock industry will be regarded in its rightful position with respect to agriculture, that is, as being its chief support and its strongest pillar.

"The reason for my faith in live stock as a guarantee for the permanence of our agriculture rests upon two main facts. First, that our live stock supply to the soil those constituents which promote and permit plant growth of all kinds. The first few crops produced by our virgin soil are heavy for they draw upon the fertility which has accumulated through the decay of vegetable matter of centuries. A century is a short period of time in the world's life. What has taken centuries to accumulate may unfortunately be subjected to waste and be lost to the generations which it was intended to serve by the wasteful methods of one generation of careless farmers. The other fact on which my faith in live stock as a dominant factor in our agriculture rests is that men love live stock and that greater skill and thought and personality and application is required in the production of high class forms of animal life than is necessary in those who would make successful grain growers. In fact we find that these men on our farms who are producing live stock of high quality are usually producing grain crops of superior merit.

"I believe also that there is special reason for the dairymen of our province to be encouraged and to develop their dairy herds from the standpoint of production first and secondly to carry the development along the line of increasing the number of dairy cattle kept. I would commend that order of advancement. We have heard that faith without works is dead. If this is true, then it is also true that without faith we do not have works and since we desire to increase our work in the dairy branch in this province it may be well for us to notice some reasons why our faith should be strong in the dairying business and why, because of this strong faith, our work should be greatly increased.

"I am of the opinion that our climate is not excelled for the successful breeding of dairy cattle and also for the bringing of these carefully bred animals to their highest possible development. We have a dry air in the winter seasons, our average winters are not so severe as the average of most of the other provinces of Canada. While it is true that the thermometer registers low temperatures it is also equally true that the penetration of the cold air in Alberta because of its dryness is not as great as in the eastern provinces. Our province as a whole is well watered, our natural pasture in central Alberta is quite good, while we excel in the production of forage crops such as peas and oats, and in alfalfa (comparing the production here with other unirrigated lands), roots and such coarse grains as barley and oats. Cultivated grasses such as timothy, brome, western rye, and blue grass flourish here and aside from alfalfa, among the legumes, we have alsike clover and red clover and I may say that I have never seen alsike superior to that which central Alberta can produce. We have, therefore, a large range of fodder crops suitable for feeding high class dairy cows, we have a climate suitable for the breeding of these cows and from every country we are drawing those progressive people who are looking for new opportunities from which we can draw the men who are to do this business and bring the live stock industry in general and the dairy industry in particular in Alberta to that standard which nature has equipped her to occupy.

"Professor Lehmann at the dairy school two weeks ago gave a number of chemical pictures; at least he expressed in brief form on the blackboard affinities of carbon, the different forms of lactic acid, the right handed and the left handed and the various combinations possible with their hydrels. And coming after such an array of pictures, I thought it would appear as though I were not giving to the class a very definite contribution if I failed to give a picture. It occurred to me to place in the centre of my picture the letter "C" which should stand for the very foundation of the dairy industry, the dairy cow. As in the case of carbon, the cow has affinities. One of these essentials I consider to be represented by the letter "B" and from that again a very close affinity of "S." Again in another direction I place another affinity "H" and from it two affinities to be represented by the letters "L" and "V." In another direction I place an affinity the letter "M" and in close relation to this again the letter "S." On the opposite side of the central letter "C" we place the letter "F" and in close relation to this we have the letters "V," "P" and "Q." Thus you see we have every demand made upon the cow satisfied for if we are to require that the cows kept upon the dairy farms of our province are to return to their owners the highest possible percentage of profit, these cows have in turn the right to demand of their owners that they be well bred which is represented by the letter "B" and since even the most careful breeders find that their efforts toward breeding the highest type of animal are not always successful, it follows that these cows, no matter how much skill has been exercised in their breeding it is necessary that they be selected. Having endeavored to breed good cows as far as the breeder can and then having proven the accuracy of his standards by the scales so that his selection is based on performance, then it behooves him to give to these cattle the proper kind of housing represented by the letter "H." This housing should have at least two main points in view, light and ventilation, represented by the letters "L" and "V." Having bred, fed and housed our cattle satisfactorily, the efficient dairyman should give to them successful management represented by the letter "M," its close affinity in this instance is system typified by the letter "S." On the opposite side of the central letter "C," we placed the letter "F" which stands for feeding and in close affinity with this we have the essential features of a satisfactory ration represented by the letters "V," "P" and "Q"; variety, palatability and quantity.



"I would wish first to deal particularly with a few points in connection with two of the affinities of the dairy cow first mentioned, breeding and housing.

"I am of the opinion that it would be unwise at this stage of our development in the province to urge that before a man could hope to achieve any notable success as a dairyman that he be advised to purchase pure bred dairy cows, that in my opinion is not practicable for the average dairyman to do but the average dairyman can buy a pure bred dairy bull or secure the services of one. There are many parts of Alberta where the neighbors are settled sufficiently close to each other to permit of three or four men uniting in the purchase of one good bull. In the purchase of a bull for grading up the dairy herd it is important that the individual purchased be the progeny of animals which have been big producers. Merit is the only excuse for pedigree but sometimes pedigree is nothing more than a record of breeding of dairy cattle and does not represent production. While the animal purchased should be a good representative of the breed whose name he bears, he should also represent in himself a line of producing ancestry of sufficient strength and length to warrant the expectation that his use on grade cows would result in his progeny being heavier producers than the dam. Future selection of a sire to continue the improvement should be from the same breed. By following this system an improvement is bound to be effected and a change for the better brought about. That is to say that there are many dairymen in this province whose herds are not producing more on the average this year than they did six years ago. Rather than advancing they are standing still and instead of to-day receiving an increased return for their feed which should represent at least 25% increased profits at no greater cost, other than for a bull, they are not receiving 1% increase in profits. Every man should so direct his energies that as the years pass the skill and brains put into his work should be returning to him an ever increasing return. I do not believe that a man who can afford to keep a dairy herd could afford not to own a pure bred dairy bull or to secure the services of one. This then is my opinion as to the first step in breeding dairy cattle and a practical step within reach of almost, if not all, dairymen.

"Having bred our dairy cattle it is necessary that we select them basing our selection upon the scales as to weight and a Babcock tester as to quality. If our standards have been wise and correct the scales will in the majority of cases bear out that judgment and through the aid of the scales and tester, we will be in a position to discard that percentage which do not measure up to our standards as to production. If our standards of breeding and our ideals have been wrongly based the scales and test will in the majority of cases, impress that mistake upon our minds and we will be led to change those ideals.

"The housing of dairy cattle we will now consider. We have said that the two chief points to be considered in housing were light and ventilation. These features may be included in the construction of buildings which are not particularly expensive. I know of one breeder who has a stable in a side hill, it has a board front to the south, well supplied with windows. It is covered with poles and these in turn covered with straw. It is floored with plank and supplied with good wide and deep gutters so that the cows are clean, they have plenty of light, the intake of air is regulated through the windows and the roof itself supplies the outlet. By changing the straw occasionally, conditions, particularly in dry weather, are good. The roof could be boarded at small cost, that cost to be defrayed as soon as the cows have brought in sufficient income to allow it if the man had not that amount of ready cash when he started in. We must admit that in the starting of operations in this country, there are many men who are not able to do what they would like to do and are compelled to adopt means which their cash balance may allow. In the construction of a dairy barn let us have light and ventilation, dry floors and cleanliness.

PART II.

"The dairy herd that has been bred and housed well requires as a first essential, good management in the control of the energy represented by the high bred animal comfortably housed. In the management of dairy cattle as well as in the development of other industries, system is necessary and the word "system" will probably express as completely as any that can be used, the regularity, the well thought out scheme, the perfectly ordered plan that has characterized successful dairy management. Regularity in feeding, watering and in carrying out the other operations in connection with the dairy is an important feature. To plan in regard to the freshening of the herd so that a uniform supply may be available for the regular customer whose trade is especially worth holding is essential. The period of lactation for heifers and cows should be studied and that period lengthened as far as may be profitable. The calves which should represent, each year, greater possibilities and bigger profits should be carefully fed and prepared for the heavy demands which will later be made upon their constitution.

"In discussing the last affinity, feeding of dairy cows, we touch upon a vital question. The problem as to where steam coal may be best secured and the power of the product of different mines to produce steam is demanding much attention on the part of engineers on the prairies. Unless good coal may be secured the maximum work of which the engine is capable cannot be delivered and reduced to acres ploughed, bushels threshed, or miles covered. The engine, failing to do its work, results in a loss of time. The skilled labour necessary to its operation is not as productive of results as if the fuel fed the engine had been of the highest class.

"The dairy cow represents skill in breeding, expense in housing, and thought and application in the management. If the fuel fed to her—which she burns and transforms into more condensed form is not of the highest class, the skilled labour which is necessary to develop and handle such a special purpose animal does not produce the greatest returns of which it is capable. We have in Alberta a good range of feed stuffs. We have among the grasses brome and western rye, timothy and blue grass, red top and native grass. Among the legumes alsike clover, red clover and alfalfa. We have mangels and carrots. We can produce large crops of rye for pasture or to cure for green feed. A mixture of peas and oats may be successfully and profitably grown and cut shortly after the blossom stage and before the kernel has formed to any great extent, and cured for hay. This crop gave this year on the Experimental Station, a yield of slightly more than four tons per acre as an average over eight acres, and valued at $10.00 per ton produces a profitable crop and can be fed at that price at a profit. The cost of operation runs about $14.00 to $15.00 per acre so that the green feed costs about $4.00 per ton in actual cost of production charges. The yield of alfalfa which we secured last year was two tons, sixteen hundred and sixty-five pounds which cost about $2.00 per ton to put in the barn, not including manure charge which would bring it to about $2.25. It costs us to put our roots in the root cellar about $4.00 per ton for the crop we have secured during the past four seasons. I believe that the land on the Experimental Station which has been producing grains for many years, grows stronger through the application of barnyard manure that we will be able to increase the average yield of roots which has only been about twelve tons per acre. The cost of operation amounting at present to about $48.00 will not be greatly increased with the increase of yield. Referring to the question as to whether alfalfa may be successfully grown in all parts of central Alberta, I have before me a number of letters which go to prove that in the opinion of many men who have tried alfalfa that it is a safe and sure crop. One gentleman says that he made two cuttings in 1910 getting three and one-half tons per acre, that in 1911 his first cutting was two and one-half tons per acre and later this acre carried twelve Holstein calves and the writer says: "It made the calves grow." Another gentleman says that the product of one acre fed one cow for six months and that during that period this cow produced 521 lbs. of butter. He gives it as his opinion that alfalfa can be grown on large areas. Another gentleman says that he has not had good success with his first trial but that in his opinion the variety was not hardy and through the list of these letters, of which there are a good number, there is not one man who says that in his opinion alfalfa is not a safe crop. With such a range of crops as I have named we are able to secure that combinntion of which the letter we first gave as the affinities of feeding "V," "P" and "Q" which stand for variety, palatability and quantity."

A brief but interesting discussion followed Mr. Hutton's address.

SEEING FINE DAIRY HERDS.

Although the weather was somewhat stormy in the forenoon of the second day of the convention, the majority of the delegates gladly accepted the opportunity of visiting by motor car the farms and fine dairy herds of Messrs. C. A. J. Sharman, Michener Bros., and A. H. Trimble. These gentlemen personally conducted the party through their stock barns and gave many interesting particulars about the breeding and performance of the principal animals.

The large party of visitors greatly appreciated the refreshments served at the hospitable home of Mr. and Mrs. N. Michener.

The closing session of the convention was held in the afternoon and the Dairy Commissioner addressed the delegates on the subject: "How can a Creamery Encourage and Promote the Dairy Interests of the District in which it is located." He said:

"By way of introducing what should be a mutually helpful discussion, I shall outline briefly what seems to be the present condition of and outlook for, the dairy business. I shall also suggest a few directions in which I believe all the creameries can materially encourage and promote the dairy interests of the districts in which they are located, bearing in mind the two points of contact referred to in my address yesterday, namely the market on the one hand and the patrons on the other. I say all the creameries, knowing that there are still some which are not in these respects as successful as they would like to be or ought to be. At the same time I am very pleased to acknowledge that we have a number of splendid creameries which have become successful public service institutions by reason of certain qualities in their management which we shall discuss a little later, qualities that have stood the test in all departments of modern business.

"We showed yesterday that while the creamery butter output for last year was about 10% greater than that of 1910, the increase in the milk production during the year was largely required for direct consumption in the form of milk and sweet cream. In view, however, of the general increase in both size and number of dairy herds in Alberta, there can be little doubt that it will be a matter of but a comparatively short time when the demand for milk and cream for direct consumption in our larger centres of population will be met by a sufficient supply from a much smaller area of country than now. Then the available surplus of milk and cream will find its way to the creameries and cheese factories, local or central, which can give the farmer the best returns and the most satisfactory service. As the demand for home made butter is not likely to increase beyond purely local requirements, we shall find that a steadily increasing proportion of our milk production must find its way to the market in the form of creamery butter.

"For some time to come, however, the creamery butter production of the province, and, in fact, of all the western provinces will fall considerably short of the requirements of the constantly growing local markets; large quantities of butter will, therefore, be brought in from other points in Canada and elsewhere. It is a matter of common knowledge, for instance, that a large quantity of creamery butter has been imported into Canada from far away New Zealand and shipped into all the western provinces during the past few months, in order to satisfy the consumptive demand of these markets. It is also a matter of common knowledge that the butter imported from New Zealand has been of excellent and uniform quality.

"What does this mean to the creamery interests of Alberta?

"It means among other things that the western markets will be able to take care of our increasing butter production for some time yet, so there need be no fear of over-production; it means the western markets are becoming more competitive every year and that the competition for the best consuming trade will be conducted to an increasing degree, on a strictly quality basis.

"Where can we find a more promising outlook and encouragement for the creamery business than here? We have large markets, and quality markets, right at our doors.

"This being so, the management of every one of our creameries will be well advised in making every effort to cultivate this market, and thereby promote not only their own business interests but also the dairy industry generally.

"In the expression 'Management of our Creameries' I include every person that enters into the handling of the product of a creamery from the time the cream is received from the patrons till the finished product is sent to the market.

"The ultimate market, made up of numerous consumers, draws to itself, through the channels of a more or less highly developed and efficient organization of commerce and transportation, the product that best suits its needs and purchasing power, whether that product is to be drawn from the immediate vicinity of the market or from distant parts of the earth. In this process the producer or the manufacturer who at any given time is best able to meet the consumer's need as to quantity and quality, and his purchasing power as to price, will secure the business.

"How will the creamery industry of Alberta meet this situation?

"There are certain outstanding qualities which characterize the management of any truly successful business institution, qualities which should characterize every creamery manager who wishes to become truly successful in his relations with the market, with his patrons and his competitors in business. These qualities may be grouped under the two terms, integrity and efficiency.

"Integrity stands for uprightness in mutual dealings, for 'the square deal.' Efficiency stands for ability, energy and co-operation for good management.

"Integrity in the market place demands from a creamery, as from any other manufacturing agency, goods as represented both as to quality and quantity.

"Integrity demands sixteen ounces to the pound. This applies particularly in the case of small packages, which are likely to eventually reach the consumer in the original form, such as one-pound prints.

"We hear, not infrequently, and we often read in the public press, bitter complaints from both dealers and consumers, of short weight 'pound-prints' of butter put up in dairies and creameries.

"The dealers who buy the butter in large lots are usually able to protect themselves against the 'shortweight artist,' but the majority of consumers have not the facilities to accurately check the weight of the butter they buy in small lots. They have to trust the integrity of the vendor for just weights and values. The creamery, in common with any other legitimate business, aims to secure a profitable and permanent market for its products and such a market can be retained only by honest dealings, sixteen ounces to the pound and goods as represented.

"In relation to the patrons of the creamery, integrity demands just weights and tests and clear, business-like statements of the products handled for them.

"We all know that it is not always an easy matter to satisfy all patrons that they are receiving correct weights and tests at the hands of the creamery management but if we avoid any air of business secrecy, which is sometimes noticed hovering around a creamery, we shall be well on the way to gain the confidence of all our patrons. Some creameries impress upon their patrons the fact that they are welcome visitors at any time, free to see the weighing and testing of their cream, others have gone so far as to invite committees of patrons to visit the creamery specially on testing days so they may become thoroughly familiar with both the principles and the practice of sampling and testing of milk and cream. Dissatisfied patrons are usually asked to act on such committees and urged to attend, as in most cases their dissatisfaction is due to a lack of knowledge of how the work in the creamery is conducted. The mere fact of the patrons being given to understand that the creamery is a wide open institution to them at all reasonable times, will do much to disarm suspicion and inspire that confidence which should exist to a marked degree between the patrons and the management of a creamery.

"Regarding our competition in business, integrity demands that we do not stoop to any act of misrepresentation in our desire to increase our own patronage by 'switching' some of his. If we have good reason to believe that we can serve any of his patrons better than he can, or does, himself, then we simply go to them with a straightforward, clean cut business proposition and in so doing take no unfair advantage of any patron's lack of knowledge of the more technical details of the creamery business nor of the temporary absence of the other fellow.

"We should remember that human sympathy is generally with 'the under dog.' This humble term may be justly applied in a figurative sense to the competitor who is unable through absence, to defend himself and his business dealings.

"Efficiency stands for general ability, for mastery, and in a creamery involves economical management, skilled work and good salesmanship.

"As our creamery industry grows, as competition for patronage becomes keener among individual creameries and as the patrons become better acquainted with the details of the creamery business, the profit of operating must be sought largely through economical management, through the elimination of waste. This is, I regret to say in several creameries an unexplored territory. As samples of sheer waste I may mention a few of the more common cases. Packing materials of all kinds are often rendered useless through bad storage and contact with dirty floors, ice is wasted through badly constructed refrigerators, fuel is wasted through bad firing under dirty boilers, badly bricked in, through pounding engines and leaky valves and joints in the steam pipes, through needless running of the engine during a day of poorly planned work.

"If large industrial establishments run their business in the loose shipshod way that some creameries run theirs they would soon land in the hands of the receiver.

"Sometimes we find considerable waste of cream and butter in the course of a day's work in the creamery, through cream cans and vats not being properly rinsed out and by allowing butter granules to run away with the buttermilk or wash water from the churn.

"The patrons are quick to notice such waste around a creamery and are very likely to lose confidence in the management. Who could blame them if they do.

"In a single day these losses may not be very great but they will amount to a good deal in the course of a season, and the cumulative effect of the small daily wastes that occur through bad management is moreover the loss of the confidence of the patrons. Loss of confidence means loss of business.

"Skilled work: The butter maker-manager who is worthy of the name always aims to turn out a quality product which will sell in the best markets and give 'satisfaction with every piece.' In order to do this he must study the raw materials which he works with, he must study the best working methods, his finished product and the requirements of the market to which he caters and afterwards put all these factors in the right relation to one another, so as to secure the desired results.

"Such a study involves careful and often hard, sustained, patient work.

"Fortunately in this day of excellent and low priced technical literature a butter maker can get the benefit of the experience and practice of many other workers in the same field. He is not obliged to 'work out his own salvation' entirely when many expert advisers can be consulted on practically every phase of the business at any hour of the day, in agricultural, trade and dairy journals, books, departmental reports and bulletins now available by the score.

"The department is always at the service of the creamery and dairy man. Expert instructors are in the field throughout the year and, as you know, visit the creameries from time to time. Their experience is at the disposal of the butter maker and manager and their advice may be had for the asking.

"The department also conducts short course schools for creamery buttermakers where the practical work as well as some of the principal problems and difficulties of the dairy and creamery are taken up and dealt with in a practical way.

"Information is always available for the person who will look for it.

"Good salesmanship: We are told that 'well made is half sold.' This applies in a special sense to a commodity such as creamery butter. Salesmanship involves a knowledge of the requirements of the markets to which we wish to cater; it also involves a knowledge of the channels through which that market can best be reached and most satisfactorily served.

"While every creamery desires to secure a quality market for its butter production, it is but natural that the patrons should in turn, be furnished with a quality market if they are willing to supply a good grade of cream. The grading of the cream and the premium system of paying for it which was adopted at the beginning of the season 1910 by the department in cooperation with a number of creameries in the province has proved conclusively that the patrons respond promptly to any reasonable reward offered for special quality, just as the butter market generally responds to quality in products by willingly paying a good price for it.

"The management of the creameries may in this direction exercise their salesmanship and thus perform very valuable service between their patrons and the market. In performing such service they will, themselves, participate in the gains.

"Our discussion so far has been confined to the buttermaker-manager's activity at the creamery, his place of business. There is another side to his work not less important, which merits more than passing reference, namely his activity in the field. In using the expression 'field,' I have in mind the territory somewhat elastic in extent from which the cream supply for his creamery is drawn. Like the management of any other commercial institution, every creamery manager desires to increase the volume of business, because up to a certain point, other factors being equal, an increase in business means an increase in profits.

"The business of a creamery can be increased (1) by getting more patrons to supply cream to it; or (2) through a larger cream production by its regular patrons.

"There are several ways open to a creamery manager to secure more patrons.

"He may secure as patrons farmers of his district who are just beginning to go into dairying; he may go after some of those in his district who are making butter on the farm for the general market or he may persuade patrons of a competing institution to patronize his own.

"The first and second classes of prospective creamery patrons that I have just named, usually require considerable persuasion to change from a method which they have been following for some time, perhaps for a long time. Working methods followed for a sufficiently long period become a habit and we all know that old habits are not easily changed unless there be some very strong reason for a change. While these people must be persuaded that it is to their advantage to change their methods, they also have to learn their part of the creamery business. They have to learn the 'why and the how' of things in that business and this means, often, misunderstandings, unless the creamery seeking their patronage makes good all promises made and extends to their new patrons the facilities we referred to a few minutes ago in our discussion of integrity at the creamery.

"In the field the creamery manager can do a good deal to encourage and stimulate interest in the dairy business. Aside from giving his patrons what we have termed a quality market for their cream or milk at his creamery he can help them to make their dairy operations more profitable by encouraging the systematic use of weigh scales and the Babcock tester. It is admitted upon every hand that in all herds some cows are better and more economical producers than others, but these can be discovered only by means of the scales, tester and a carefully kept record of their yields. This work might well be helped along by the creamery manager who desires to co-operate with his patrons and it ranks perhaps equal in importance with the principle of paying for cream upon a strictly quality basis. I know of creameries that have offered to test, free of charge, and at any time, all samples of individual cows' milk brought in by their patrons.

"When a dairyman has learned to discover the most profitable animals in his herd, he is well on the road towards the building up of a profitable herd by suitable care, feeding and breeding. As Mr. Hutton dealt so ably with these points in his address last evening I shall not attempt to discuss them now.

"The creamery manager can help circulate among his patrons some of the bulletins and other helpful literature that is issued from time to time bearing upon the various phases of the dairy business.

"He can help to advertise, arouse interest in and secure a large attendance of his patrons at the public meetings and short courses provided by the department of agriculture from time to time for the discussion of dairy and kindred subjects. It is safe to assume that no one engaged in dairying knows all about it and that a more intimate knowledge of their business makes them better dairymen and better creamery patrons.

"He can also do something to promote the social side of his patrons by helping to arrange occasional district picnics in summer or other social gatherings in winter. On such occasions people can get better acquainted and learn to appreciate one another.

"In fact, the person who is imbued with the true spirit of service can find many occasions to express that spirit. He will find ample opportunity to demonstrate the motto of a prominent business builder that 'he profits most who serves best.'

"A creamery whose management is characterized by integrity, efficiency and a desire to serve is a public service institution in the true sense of the term, an important factor in the development of the dairy industry generally and a benefit to the district in which it is situated."

The discussion which followed the commissioner's address covered a good deal of ground and the concensus of opinion seemed to be that there was yet a good deal of field work that the creameries could do with advantage to themselves and to their patrons.

The final address of the convention was given by Mr. E. Michener, M.P.P. He complimented the assembled dairymen upon the substantial progress that was being made in the dairy industry of the province. He said that the general pursuit of diversified farming would lay a solid foundation for the future greatness and general prosperity of Alberta. Mixed farming is the backbone of any agricultural community and dairying is the backbone of mixed farming. Dairying properly conducted is interesting as well as profitable work. It gives results. The effect of judicious feeding is shown in the milk pail and the results of careful breeding are shown in the production of better animals.

He had found that dairy cows respond to care and good treatment better than any other animal on the farm and while the great majority of the cows in the province are not of the dairy type he believed that in many of them the yield of milk and butter could be considerably increased by a little more care and attention on the part of their owners. This has been discussed in a very able way by Mr. Hutton in his address of the previous evening.

Mr. Michener saw great possibilities in store for the people of Alberta, rich as the province is in natural resources, and it is the privilege of the dairymen to do their part in helping to make Alberta great and prosperous.

In conclusion he expressed his pleasure in meeting so many representative dairymen of the province and wished them every success in their undertakings.

The dairy commissioner closed the convention thanking, on behalf of the department of agriculture, the several speakers who had assisted at the convention and the delegates for their attendance and interest in the proceedings. He hoped that they had each received some information or inspiration which they could take home and disseminate among their fellow dairymen in the home districts.

Votes of thanks were passed to the citizens and to the board of trade of Red Deer for their generous hospitality to the delegates, and to the press for the splendid help it is giving to the dairy interests of the province.

VII.—JUDGING AT AGRICULTURAL EXHIBITIONS.

The dairy branch supplied judges for 37 agricultural exhibitions during 1912, placing the awards in the "dairy" and "domestic" classes. At a number of points the dairy judges placed the awards in several other classes as well, such as "poultry," "grains and grasses" and "roots and vegetables."

The exhibitions at Calgary, Cardston, Manville and Red Deer conducted a "milking test" on their grounds, extending over a period of one to two days. The animals entered for the test ranged from 3 to 13. The "milking test" is a feature that is not only likely to be continued by the associations just named but will also be taken up by others, especially in the more advanced dairy districts.

VIII.—DAIRY INSTRUCTION WORK.

All the creameries and some of the cheese factories have been visited by the dairy instructors once or oftener during the operating season. The inspectors' reports show that with very few exceptions the sanitary conditions of the factories were good and satisfactory.

SHORT COURSE SCHOOLS.

Instruction and demonstrations in approved home dairy work and methods were given by members of the dairy staff at the short course schools conducted by the department at Claresholm, Olds, Gleichen and Stony Plain. Special attention was given at the several schools to the requirements of the most remunerative markets for dairy products within reach of the people there.

MIXED FARMING SPECIAL TRAIN.

A baggage car on the mixed farming special train, which made a tour of the province visiting 60 points during October and November, was fitted up for lectures and practical demonstrations in dairying. The "dairy car" was generously patronized at all points. In a number of cases the talks and demonstrations by those in charge had to be repeated because there was not enough room in the car to hold at one time the number of people who were interested.

A talk was given at each point on the production and care of clean, wholesome milk as an essential to successful dairying. Referring to the marketing of dairy products, various types of butter were exhibited to illustrate how that commodity sometimes reaches the general market. The "horrible example" in this case being a package (a filthy soap box) of home made butter put up in prints and rolls and shipped to one of the wholesale houses in Calgary by a "country storekeeper."

It was pointed out that the producers of butter should always be interested in seeing their product reach the market in the best possible condition; that it should not be a matter of indifference to them as to whether the local merchant, to whom they sell it, afterwards sends it away to the market in a nice clean box or tub, well packed, or in a dirty soap box, candy pail or other nondescript receptacle. Every producer should endeavour to follow his product in imagination at least as far as possible on its journey towards the ultimate market, the consumer, and whenever practicable help to either improve or to eliminate the agency or agencies that are responsible for undue deterioration to the quality and market value of the product on its journey to the consumer.

SHORT COURSE FOR CREAMERY BUTTERMAKERS.

Arrangements were made for the use of the Red Deer creamery as a short course school for creamery buttermakers. A class room was fitted up in the building.

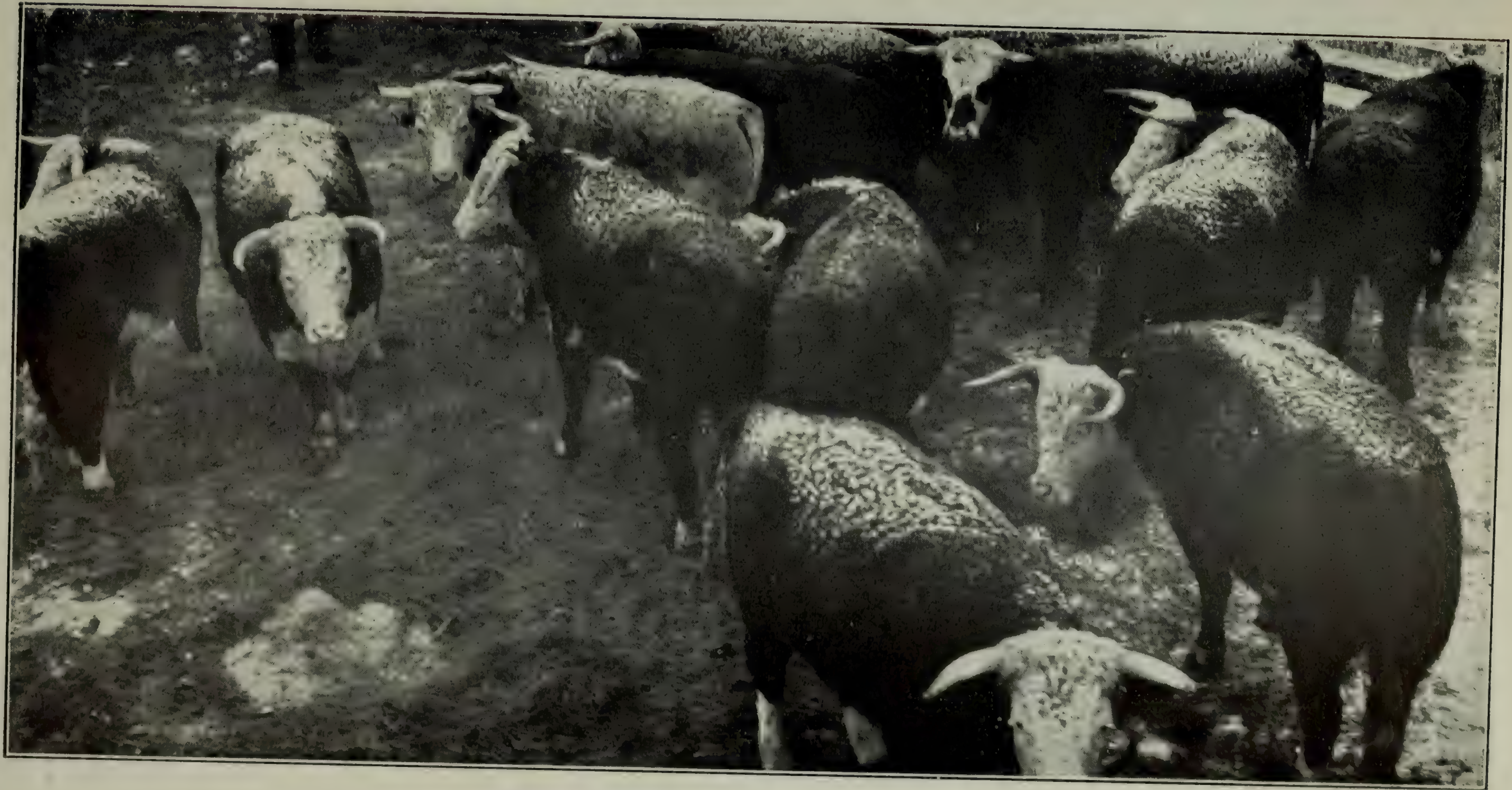
The following announcement was mailed to all creamery managers and buttermakers in the province, whose names and addresses we had, outlining the scope of the course:

"The Department of Agriculture offers two courses of instruction to creamery buttermakers at Red Deer, Alberta, commencing on Monday afternoon the 18th of March.

"Each course will last two weeks. In this way a buttermaker who expects to commence his season's work by the beginning of April may attend the March course and anyone who is not free to do so before the first of April may attend the course beginning that date. The lectures in the class room will be completed during the first week of each course leaving the second week largely for review and practical work for students who wish to specialize in any of the departments of the course.

"Our market conditions—competition on every hand—make it imperative that the creamery managers, buttermakers and patrons fully understand both the technical and the practical side of their business. 'He profits most who serves best.' The work of the short courses in dairying is designed to assist those who want to 'serve best' and it is free of charge. A general invitation is extended to the creamery buttermakers of the province to take advantage of the services of this course. Following is a brief outline of the work that will be taken up:

"(A) In the class room: Lectures will be given on chemistry and bacteriology in relation to dairying; the principles underlying creamery organization; bookkeeping and general management; markets and marketing of dairy products; dairy herd management, etc.



No 4.—FIRST PRIZE CARLOAD FAT STEERS.

Fat Stock Show, Calgary, 1912. And First Prize Carload of Fat Steers at the Fat Stock Show, Toronto, 1912.
Owned by S. Downie & Sons, Carstairs.

"(B) Practical work: The Red Deer Creamery management has generously placed the creamery and equipment at the disposal of the department for dairy school purposes and instruction and practical work will be given on each day in the following departments:

"(1) Testing room: The sampling and testing of milk and cream for butter fat and acidity and the testing of butter for moisture and salt contents. Complete instructions will be given in the use of the Lactometer and the Babcock Test, the acidimeter and alkaline test, the Mitchell-Walker, the Geldard, the Farrington and the Irish Moisture Tests.

"(2) Buttermaking room: An ample supply of milk and cream is assured and practical instruction will be given in this department in the pasteurization of milk and cream, in preparing pure culture ferments for cream ripening, in the grading and scoring of cream and butter; in churning, working and packing of butter; in creamery sanitation, etc.

"(3) The engine room: The care and handling of boilers and engines. Pipe fittings, soldering and general repair work will be fully explained and demonstrated by the instructor in charge.

"(4) The Bookkeeping department will present a complete yet simple accounting system for creameries, including patrons' accounts, stockbook, cash and general ledger. Specimen forms of these will be given to each student so he may become familiar with all details.

"Buttermakers are invited to attend a whole course, but if this is impossible anyone attending for a shorter time will get the greatest possible benefit from the time spent. The students will be expected to take in the practical work under the direction of the instructor in charge of each department. Special attention will be given to scoring and grading of cream and butter. A number of typical samples will be provided for the purpose.

"The regular instructors of the school, and their subject, are as follows, viz.:

"The Dairy Commissioner, director of the school, deals with creamery organization, management and economics, markets and marketing, dairy legislation, etc.

"Prof. A. Lehmann, University of Alberta, chemistry.

"Dr. D. G. Revell, Director Provincial Laboratory, bacteriology.

"Mr. G. H. Hutton, Superintendent Experimental Farm, Lacombe, dairy herd management.

"Mr. H. S. Pearson, dairy instructor, buttermaking.

"Mr. Geo. W. Scott, dairy instructor, testing.

"Mr. J. R. Flan, engineer, boiler and engine, etc."

There was a good attendance at both courses and we were fortunate in securing the assistance of Prof. Lehmann, Dr. Revell and Mr. Hutton. The text of one of Mr. Hutton's addresses will be found elsewhere in this report.

IX.—PUBLIC MEETINGS.

The writer and the dairy instructors, Messrs. H. S. Pearson and Geo. W. Scott, attended and addressed special meetings at Ferry Bank, Macleod, High River, Claresholm, Nanton, Bergen, Elkton, Spring Lake, Wetaskiwin, Erskine, Ryley, Rising Sun and Sunnydale on creamery management, grading of cream, and payment according to quality, co-operative dairying, etc.

At the request of Mr. J. A. Ruddick, Dairy and Cold Storage Commissioner for the Dominion, the writer delivered an address on "Grading of Cream," before the annual convention of the Dairymen's Association of Western Ontario, held at Ingersoll in January last.

X.—CORRESPONDENCE.

During the year 1,726 letters were received at this office and 2,755 sent out.

XI.—ACKNOWLEDGMENTS.

I cannot conclude my report without recording my personal appreciation of the generous consideration which the recommendations and work of this branch has received at the hands of the minister and his deputy, and in relation to our commercial work, at the hands of the treasury department.

I also desire to acknowledge and commend the conscientious and faithful work done by my co-workers in this branch—the instructors in the field and the staff at the government cold storage and at the office here. Any success that has attended the work of this branch is due very largely to the hearty co-operation of its workers and the dairy interests in the province generally.

Great credit is due, also, to the public press for the part it is taking in encouraging and promoting better farming and better dairying.

C. MARKER,
Dairy Commissioner.

3.—*REPORT OF SUPERINTENDENT OF SEED AND WEED BRANCH.*

SIR,—

I have the honour to submit herewith my second annual report of the seed and weed branch.

I.—WEEDS.

During the months of January and February I attended short courses in agriculture held at Claresholm, Gleichen, Stony Plain and Olds. Lectures were delivered on the subject of weed control and eradication. Mounted specimens of the more serious weeds were displayed for the inspection of those present. Small sample cases containing seeds of the various noxious weeds were also displayed, and the distinguishing characteristics of each pointed out. The farmers showed a marked interest and seemed anxious to become acquainted with the weeds, their seeds and the best methods of holding them in check. Much valuable information which will be of use to the department was obtained from the discussions which took place during the meetings.

Owing to the rather dry weather in the early part of the season of 1912, the weeds did not get a very serious start until the latter part of the season, except in the case of such weeds as stinkweed and tumbling mustard, growing in land seeded to winter wheat or upon land which was seeded to spring grain. As stinkweed is a winter annual, that is, a plant which starts growth in the fall and lives through the winter, and therefore begins to blossom and produce seed very early in the spring, it was thought necessary to start inspectors to work in districts infested with stinkweed in the southern part of the province as early as May 5th. This was followed up and in most districts a considerable amount of good was accomplished. The same method was adopted throughout the season depending upon the weeds with which the various districts were infested. In the earlier southern districts the inspectors were started to work earlier than in the later districts of the north.

Though such weeds as Russian thistle made a very rank growth during the latter part of the season owing to the dry weather, quite effective work was done in most districts by the farmers, in holding them in check.

The work of the inspectors and the department was for the most part educational. In very few cases was it found necessary to enter prosecutions or employ men and teams to destroy weeds. This was only necessary on vacant lands which were not being farmed and when the owners could not be reached. A different policy was adopted in regard to these cases than in other years, when the practice was to plow and cultivate the land throughout the summer thus entailing a great expense upon the department and in cases where the land was not cropped the succeeding summer, the weeds grew more luxuriantly than ever. The policy this year was to mow the weeds early before the seed was formed or in cases that were too far advanced, the weeds were first mowed and then raked and burned. The result of this plan is a greatly lessened expense, and these vacant lands gradually become covered with native grasses and the weeds are choked out.

Owing to the great demand for information regarding the identification and eradication of weeds, it was thought necessary to prepare a bulletin dealing with the more common weeds of the province and the best means of destroying them. This bulletin was prepared during the winter by myself and Mr. C. E. Lewis, Superintendent of Fairs and Institutes and formerly Chief Weed Inspector for the province. An effort was made to make this bulletin as practical as it was possible to make it. 20,000 copies were printed and 10,000 have already been sent out in response to requests, to farmers, public and normal schools, agricultural colleges, departments of agriculture, etc. This bulletin has proven very popular and is filling a long felt want in this province.

SPRAYING EXPERIMENTS.

During the summer of 1911, experiments were conducted with iron sulphate for the purpose of destroying wild mustard or charlock, and as stated in the report of 1911, with a fair degree of success. These experiments were repeated at Olds this year, except that they were performed earlier in the season. The result was that practically all the mustard was destroyed. The solution was made of 100 pounds of iron sulphate to 50 gallons of water. The mustard sprayed was growing in a field of oats and was just coming out in blossom when sprayed. An examination about 10 hours after the spraying was done showed the mustard plants badly blackened and wilted and the oats unharmed. This was due to the hairy nature of the mustard leaves which retained the spray, while the smooth surface of the oat leaves allowed the spray to run off before its caustic nature affected them.

On account of the serious nature of tumbling mustard in portions of southern Alberta, it was decided to try the effect of iron sulphate spray as a means of destroying it. The iron sulphate was supplied by the Canadian Steel and Wire Company of Winnipeg, free of charge, and a spraying outfit was kindly loaned by the Cockshutt Plow Company of Calgary. A five acre plot was marked off and sprayed in strips leaving a strip unsprayed as a check. The solution was applied on one strip at a strength of 100 pounds of iron sulphate to 50 gallons of water and upon another at the rate of 150 pounds to 50 gallons of water. These plots were examined fifteen hours after the spray was applied. There was quite a marked difference between the sprayed and unsprayed plots. The sprayed plots were very much blackened and the lower leaves were badly wilted. Plants that had reached the blossom stage however, were apparently uninjured except that the lower leaves were blackened. The plots were again examined three days later and most of them seemed to have recovered to quite an extent from the effects of the spray. The younger plants which were growing in the form of a rosette close to the ground, were sending up stalks from the centre and though the bottom leaves were destroyed the flower stalks appeared to be quite healthy. The plots were examined at intervals throughout the summer and the great majority of the plants produced seed. The plots sprayed with the stronger solution were not affected to a much greater extent than those sprayed with the weaker solution. From our observations we came to the conclusion that from this experiment at least iron sulphate solution was not effective in destroying tumbling mustard. There were several causes, however, which might have affected the result. The plants sprayed were growing on stubble land and the majority of them had passed through the winter as winter annuals and were tougher than plants which had started in the spring. A large number were already in blossom and the smooth blossom stalk did not retain the spray. We expect to continue these experiments next year on spring ploughed land which is being cropped. The plants should be much more tender and thus more susceptible to the action of the spray. However, the results of the year's work would not lead us to expect very satisfactory results.

The following is a list of the weed inspectors employed during the season of 1912:

Alred, J. G.	Raymond.
Blue, Oliver	Alsask.
Barrett, Milton	Stettler.
Brown, J. C.	Lethbridge.
Britain, W. J.	Castor.
Bowtell, H.	Frog Lake.
Boileau, F. X.	Duvernay.
Cardiff, G. M.	Calgary.
Callaway, E. J.	Cochrane.
Capron, Jos.	Blackfalds.
Drollinger, J. W.	Claresholm.
Despins, L.	Brosseau.
Ellis, John	Bowell.
Ferguson, C. A.	Cardston.
Fyfe, J. T.	Islay.
Ferris, Robert	Hayter.
Giles, William	Munson.
Haines, L. A.	Turin.
Hutton, G. H.	Lacombe.
Hall, G. B.	Cayley.
Hogan, Ed.	St. Albert.
Hull, Thomas	Leduc.
Jaffery, Peter	Olds.
June, Robert	Namao.
Kelly, W. J.	Crossfield.
Lane, R.	Pincher Creek.
Lee, H. W.	Gleichen.
Mackintosh, H.	Macleod.
Mohan, T. D.	Warner.
Murray, George	Seven Persons.
Miller, W. H.	Carmangay.
Mercer, J.	Magrath.
McGowan, R. J.	Killam.
McComb, L.	Lakeview.
McArthur, D. K.	Olds.
Nelson, Frank	Bruce.
Orlecki, S.	Duvernay.
Smith, J. D.	Edmonton.
Smibert, G. H.	Elkwater.
Slauson, D. K.	Burdett.
Sproule, O. B.	Orbindale.
Smith, A. M.	Barney.
Steckle, N.	Edmonton.
Tate, Thomas	Bittern Lake.
Ulmer, Ludwig	Stony Plain.
Van Orman, R. A.	Taber.

II.—SEED BRANCH.

The work of encouraging the production of pure seed grain was taken over from the Dominion Department of Agriculture in the month of November. Since that time a great deal of work has been done by way of locating sources of seed supply, answering correspondence, holding seed grain fairs and field grain competitions.

SEED FAIRS.

During the winter twenty-eight seed fairs were held, the entire number of them being held before the Provincial Seed Fair. The object of these fairs was to provide a means for the dissemination of seed of good quality. Each sample was marked after the judging with a tag showing the number of bushels for sale and the price per bushel. A good deal of seed was sold locally in this manner, and in order to give greater publicity, a bulletin was issued giving the names of the various prize winning grain at each fair, the amount each man had for sale and the price per bushel. Seven thousand copies of this bulletin were distributed throughout the province and were the means of many of the exhibitors disposing of their grain at remunerative prices. The following is a list of the agricultural societies holding seed fairs in 1912:

CIRCUIT NO. 1
- Granum.
- Stavely.
- Okotoks.
- Taber.
- Cardston.
- Magrath.

CIRCUIT NO. 2
- Vegreville.
- Innisfree.
- Vermilion.
- Lloydminster.
- Viking.
- Provost.
- Sedgewick.
- Killam.
- Daysland.
- Irma.
- Tofield.

CIRCUIT NO. 3
- Lacombe.
- Innisfail.
- Bowden.
- Olds
- Milnerton.
- Trochu.
- Munson.

CIRCUIT NO. 4
- Langdon.
- Stony Plain.
- Pincher Creek.
- Leduc.

The following men acted as judges at these fairs and delivered addresses on subjects such as "Soil Cultivation," "Prevention of Smut" and the "Eradication of Weeds":

J. Cook, Cochrane.
H. Mackintosh, Macleod.
W. J. Glass, Macleod.
F. S. Grisdale, Lethbridge.
A. Lougheed, Bowden.
J. D. Smith, Edmonton.

A suggested set of rules and prize list was sent to each secretary holding a seed fair and was in most cases adopted. This was as follows:

The............annual seed fair of the.......................... Agricultural Society will be held.......................1912, for the exhibition, sale and exchange of farm seeds.

RULES GOVERNING SEED FAIR.

1. All seeds entered for competition must have been grown by the exhibitor in the year 1911.

2. No seed shall be admitted for competition for prizes unless the quantities of seed for sale, as per sample exhibited, are at least 25 bushels of wheat, 50 bushels of oats, 25 bushels of barley, 25 bushels of rye, 10 bushels of flax, 5 bushels of brome grass, timothy, red clover, alfalfa and rye grass, 10 bushels of peas, 25 bushels of potatoes.

3. In classes 1—11 inclusive 1 bushel of seed must be shown; in 12-

18 ½ bushel. All exhibits of seed shall be held to be representative of the total quantity of such seed offered for sale by the exhibitor.

4. Small samples of every exhibit will be taken and held by the society in charge of the secretary for exhibition purposes. These samples may be produced as evidence in the event of any dispute arising from the claim that the seed exhibited was not representative of that afterwards sold.

5. No premium shall be awarded on exhibits that contain impurities which, in the opinion of the judge are of a noxious nature.

6. No exhibitor shall be allowed to exhibit more than one sample of same variety in any class.

7. Entries shall be free to members of the...................... Agricultural Society.

8. All samples of seed must be labeled after judging with the name and address of the exhibitor, the name of the variety, the amount of seed for sale and the selling price.

9. In case of dispute a statutory declaration, that the above rules have been complied with may be required from each or any exhibitor of seed.

10. All exhibits for competition for prizes must be delivered at the town hall................not later than......a.m. on date of fair, and shall not be removed until the close of the fair.

11. No exhibits or sacks or other coverings containing them will be admitted with name, marks or initials thereon and all must remain closed until judging commences.

PRIZE LIST.

The following prizes will be awarded on the best samples of seed exhibited in accordance with the rules governing the fair:

CLASS	1	2	3	4
1. Marquis and Red Fife	$8	$6	$4	$2
2. Spring wheat, any other hard variety	8	6	4	2
3. Fall wheat, any hard variety	8	6	4	2
4. White oats, long	8	5	2	
5. White oats, medium	8	5	2	
6. White oats, short	8	5	2	
7. Barley, two-rowed	6	4	2	
8. Barley, six-rowed	6	4	2	
9. Rye	6	4	2	
10. Peas, field	8	5	2	
11. Flax seed	6	4	2	
12. Brome Grass seed	4	2	1	
13. Timothy seed	4	2	1	
14. Rye Grass seed	4	2	1	
15. Red Clover seed	8	5	2	
16. Alfalfa seed	8	5	2	
17. Potatoes, white	5	3	2	
18. Potatoes, red	5	3	2	

III.—FIELD CROP COMPETITIONS.

During the summer twenty-four agricultural societies were induced to take up the work of holding standing field grain competitions. There were approximately 250 entries, making a total of 2,500 acres which were cared for with the object of winning the prizes offered. A great deal of interest was taken by each society and a large amount of seed grain of excellent quality was produced. In most cases the judges reported the grain to be free from mixtures of other varieties and weeds. The following is a list of the societies which undertook the work and the amount spent in prizes at each:

Where Held.	Amount of Prize Money.
Trochu	$150.00
Sedgewick	150.00
Red Deer	200.00
Stettler	85.00
Macleod	170.00
Leduc	85.00
Milnerton	100.00
Munson	57.00
Three Hills	100.00
Edgerton	150.00
Mannville	75.00
Stony Plain	150.00
Kinnoull	100.00
Vegreville	100.00
Wabamun	45.00
Taber	170.00
Medicine Hat	150.00
Carmangay	100.00
Innisfail	65.00
Bowden	77.50
Killam	65.00
Lloydminster	100.00
Provost	150.00
Lacombe	75.00
Total	$2669.50

The following circular was supplied free to all societies:

(1) To stimulate a greater interest in the growing of first class seed grain.
(2) To encourage the practice of growing seed for next year's crop separate from the main crop, using only the best obtainable seed, sowing on the cleanest and best prepared land, allowing it to thoroughly ripen and threshing and storing separately.
(3) To obtain pure grain, i.e., free from other varieties, the presence of which can best be detected when the grain is growing.
(4) To encourage the use of seed from heavy yielding strains.
(5) To promote the growing of seed from clean, vigorous crops of uniform stand and with bright stiff straw.
(6) To encourage careful, intelligent farming and the production of grain free from weed seeds.
(7) To encourage careful observation and careful hand weeding of the farm seed plot.

1. Competitions shall be confined to fields of wheat, oats or barley, or all three provided separate prize lists are offered for each. The prize lists may be divided into separate classes for winter and spring wheat, or for irrigated and dry farming.

2. Prizes to the amount of not less than $100 shall be offered.

3. Fields entered for competition shall consist of not less than ten acres in a block and shall be situated within 20 miles of the headquarters of the Agricultural Society with which entry is made. The ten acres entered for competition must be selected before the arrival of the judge, and staked out in such a manner that the judge will be able to distinguish the block entered without difficulty. Neglect to do this will be considered a disqualification. In order to avoid mistakes and to secure information concerning methods of improvement, competitors should accompany the judge to the field.

4. Each competitor shall enter with one Agricultural Society only and must be a member of that Society.

5. Each competitor shall be allowed to make one entry only in each class, and shall pay an entry fee of $2 to the Secretary when making entry.

6. The awards will be made by judges supplied by the Seed Branch, Provincial Department of Agriculture, and according to the following or similar scale of points:

Suitability of variety	10 points
Freedom from weeds	25 "
Freedom from other varieties and other kinds of grain	20 "
Freedom from attack from smut, rust and insects	15 "
Apparent yield, considering vigor of growth and uniformity, size of head, stiffness of straw thickness of stand and stage of maturity	30 "
Total	100 "

7. Societies desiring to enter this competition must notify the Superintendent of the Seed Branch, Edmonton, not later than first of June.

8. Entries shall be made on or before July 1st to the Secretary of the Agricultural Society.

9. The Secretary shall mail to the Superintendent of the Seed Branch, Edmonton, not later than July 2nd a statement showing all entries made, arranged in the most suitable driving order for the judge.

10. The first or any prize need not be awarded unless in the opinion of the judge the exhibit is worthy.

....Agricultural Society

To the Secretary:

I hereby make entry in the competition for standing fields of seed grain to be conducted by the above Agricultural Society and agree to conform to the rules.

Kind of field...
(Wheat, Oats or Barley)

Distance from headquarters of Agricultural Society
................miles.

Post Office...

Sec................ Tp............... Range................

Name..

Entries must be in the hands of the Secretary not later than Monday, July 1st.

The Secretary will mail, not later than July 2nd, a statement giving the particulars contained in all the entries to A. McKenney, Superintendent of Seed Branch, Edmonton.

IV.—PROVINCIAL SEED FAIR.

The Provincial Seed Fair was held in Macleod in the town hall on February the 27th, 28th and 29th. The Macleod board of trade and the agricultural society rendered very material assistance in advertising and making arrangements for the fair, which was very successful in every way. There were 174 exhibitors and 375 exhibits, a considerably larger number than in any previous year.

The following is the prize list with the number of entries in each class:

NO. OF ENTRIES	CLASS	1	2	3	4	5
32	1. Winter wheat, any hard variety....	$20	$15	$12	$8	$5
4	2. Winter wheat, any soft variety....	15	12	8	5	
31	3. Spring wheat, Red Fife...........	18	14	10	6	4
38	4. Spring wheat, any other good milling variety..................	18	14	10	6	4
24	5. Oats, Banner......................	20	15	12	8	5
39	6. Oats, Abundance, and other medium length	20	15	12	8	5

15	7.	Sensation, and other short varieties	18	14	10	6	4
15	8.	Barley, six-rowed	15	10	5		
6	9.	Barley, two-rowed	15	10	5		
2	10.	Field peas	12	8	5		
8	11.	Flax seed	12	8	5		
8	12.	Timothy seed	12	8	5		
3	13.	Brome grass seed	12	8	5		
	14.	Rye grass seed	12	8	5		
	15.	Red clover seed	12	8	5		
	16.	Alsike clover seed	12	8	5		
1	17.	Alfalfa seed	12	8	5		
		Judging Competition.					
8	18.	Judging wheat	10	8	5	3	
8	19.	Judging oats	10	8	5	3	
6	20.	Identification of weed seeds	8	5	3		

In addition to the above there were ten special prizes consisting of silver trophies valued at $100.00 each and one valued at $125.00, and four cash prizes amounting to $85.00.

The following is a list of the silver trophies and cash prizes:

Class 21 (10 entries).—Best five bushels of spring wheat, silver trophy, valued at $100.00 donated by the publishers of the Farm Crops Magazine, Winnipeg.

Class 22 (9 entries).—Best five bushels of Alberta red wheat, silver trophy, valued at $100.00, donated by the Alberta Pacific Elevator Company of Calgary.

Class 23 (7 entries).—Best five bushels of milling oats, silver trophy, valued at $100.00, donated by the Calgary and Strathcona branches of the Brackman-Ker Milling Company.

Class 24 (4 entries).—Best five bushels of six-rowed barley, silver trophy, valued at $100.00, donated by the Calgary Brewing and Malting Company.

Class 25 (3 entries).—Best two bushels of two-rowed barley, sterling silver trophy, valued at $125.00, donated by the Canadian Pacific Railway Company. In addition to the trophy the company offers a cash prize of $15.00 to the winner and $10.00 as a second prize. A brewing test will be necessary in making awards in this class. The company reserves the right to purchase winning exhibits at market prices.

Class 26 (3 entries).—Best five bushels of Garton's Regenerated Abundance oats, solid sterling silver trophy valued at $100.00, donated by the Garton Pedigree Seed Co., of Winnipeg. The oats to be grown from seed obtained from this company the spring preceding the Alberta Provincial Seed Fair, and the trophy to become the property of the person first winning it three times.

Class 27 (11 entries).—Best bushel of winter wheat on exhibition, $10.00 cash; wheat to become property of donor.

Class 28 (24 entries).—Best bushel of spring wheat on exhibition, $15.00; wheat to become property of donor.

Class 29 (15 entries).—Best bushel of oats on exhibition, $10.00; oats to become property of donor.

Class 30.—Best 100 pounds of hard wheat, cash prize of $50.00, donated by Macleod Board of Trade. Competition open to all.

PRIZE WINNERS 1912.

The following is a complete list of the prize winners:

Class 1.—Winter wheat, any hard variety: A. Woolley, Norton, 1st, (Alberta Red); H. Dimm, Granum, 2nd, (Alberta Red); W. J. Glass, Macleod, 3rd, (Alberta Red); Dan Gillen, Macleod, 4th, (Alberta Red); Leo Pfefferle, Claresholm, 5th, (Alberta Red).

Class 3.—Spring wheat, Red Fife: W. J. Glass, Macleod, 1st; George Wells, Wellsville, 2nd; M. Sanford, Mannville, 3rd; J. A. Hewson, Macleod, 4th; E. Strain, Macleod, 5th.

Class 4.—Spring wheat, any other good milling variety: F. A. Adams, Macleod, 1st, (Marquis); M. Sanford, Mannville, 2nd, (Garton's No. 46); J. Loree, Innisfree, 3rd; A. S. Blackwood, De Winton, 4th; E. T. Erickson, Killam, 5th, (Stanley).

Class 5.—Oats, Banner and other long varieties: W. G. States, Morrin, 1st, (Banner); C. Funk, Stavely, 2nd, (Banner); Bowker and Jarvis, Munson, 3rd, (Banner); Thos. O. King, Raymond, 4th, (Banner); Alex Brewster, Macleod, 5th, (Banner).

Class 6.—Oats, Abundance and other medium length varieties: John Loree, Innisfree, 1st, (Silver Mine); James Dalgarno, Blondheim, 2nd, (Abundance); T. H. Lee, Red Lodge, 3rd; E. T. Erickson, Killam, 5th, (Abundance).

Class 7.—Oats, Sensation and other short varieties: J. E. Vance, Pine Creek, 1st, (Big Four); Arnstead Bros., Stavely, 2nd, (New Century); William Pick, La Pearl, 3rd, (Dodd's White); H. Hervey, Midnapore, 4th, (New Century); Johnstone Bros., Langdon, 5th.

Class 8.—Barley, six-rowed: J. E. Blore, Lillico, 1st; T. Brandley, Stirling, 2nd; John Loree, Innisfree, 3rd.

Class 9.—Barley, two-rowed: A. Woolley, Norton, 1st, (Standwell); F. H. Herbert, Strathcona, 2nd, (Standwell); J. B. Ririe, Magrath, 3rd, (Garton's).

Class 10.—Field peas: A. Woolley, Norton, 1st, (Canadian Beauty); A. Brewster, 2nd, (Goldenvine).

Class 11.—Flax seed: John Enger, Morrin, 1st; Ed. Whipple, Macleod, 2nd, (Premost); John I. Chipman, Magrath, 3rd.

Class 12.—Timothy seed: W. Teedle, Fishburn, 1st; J. L. Storey, Lacombe, 2nd; A. Lougheed, Bowden, 3rd.

Class 13.—Brome grass seed: D. Patton, Midnapore, 1st; H. Hanson, Taber, 2nd; A. Perry, Cardston, 3rd.

Class 17.—Alfalfa: John I. Chipman, Magrath, 1st, (Turkestan).

SPECIAL PRIZES.

Class 21.—Farm Crops trophy: Best 5 bushels of spring wheat, won by F. A. Adams, Macleod.

Class 22.—Alberta Pacific Elevator Co. trophy, best 5 bushels of Alberta Red winter wheat: Won by W. J. Glass, Macleod.

Class 23.—Brackman-Ker Milling Co. trophy, best 5 bushels of milling oats: Won by Malmberg & Sons, High River.

Class 24.—Calgary Brewing & Malting Co. trophy, best 5 bushels of 6-rowed barley: Won by H. G. Long, Macleod.

Class 25.—Canadian Pacific Railway Company's trophy, best 2 bushels of two-rowed barley: Won by F. H. Herbert, Strathcona.

Class 26.—Garton's Pedigree Seed Co. trophy, best 5 bushels of Regenerated Abundance oats: Won by E. Swift, Magin.

Class 27.—Best bushel of winter wheat: Won by A. Woolley, Norton.

Class 28.—Best bushel of spring wheat: Won by F. A. Adams, Macleod.

Class 29.—Best bushel of oats: Won by John Loree, Innisfree.

Class 30.—Best 100 pounds of hard wheat: Won by F. A. Adams, Macleod.

The judges who placed the awards were:

Wheat classes.—C. E. Lewis, Edmonton, and W. H. Fairfield, Lethbridge.

Oats, barley, peas, grass and clover seed.—G. H. Hutton, Lacombe, and H. B. Smith, Calgary.

JUDGING COMPETITIONS.

These competitions were held on the last day of the fair and were open to all farmers and farmers' sons in the province. The competitors were expected to judge several varieties of wheat and oats and to identify several samples of weed seeds. There were ten young men entered in this contest:

Class 18.—Judging wheat: 1st, A. R. McFayden, Macleod; 2nd, F. C. Hanes, Macleod; 3rd, J. B. Ririe, Magrath; 4th, J. Boag, Pincher Creek.

Class 19.—Judging oats: 1st, A. R. Bennett, Magrath; 2nd, J. Boag, Pincher Creek; 3rd, E. F. Tovell, Claresholm; 4th, J. B. Ririe.

Class 20.—1st, J. Boag, Pincher Creek; 2nd, F. A. Adams, Macleod; 3rd, F. C. Hanes, Macleod.

PUBLIC MEETINGS.

The meetings held during the fair were well attended and great interest was taken in the addresses and discussions which followed. The following is a list of the speakers:

Hon. Duncan Marshall, Minister of Agriculture; George Harcourt, Deputy Minister of Agriculture; James Murray, Suffield; W. H. Fairfield, Supt. of Experimental Farm, Lethbridge; G. H. Hutton, Supt. of Experimental Farm, Lacombe; Guy W. Johnston, Provost; F. S. Jacobs, editor, Farm and Ranch Review, Calgary; C. E. Lewis, Supt. of Fairs and Institutes, Edmonton.

Respectfully submitted,

A. McKENNEY,
Superintendent of Seed and Weed Branch.

4.—*REPORT OF CHIEF GAME AND FIRE GUARDIAN.*

SIR,—I have the honour to submit herewith my seventh annual report in connection with the enforcement of The Game Act and Prairie Fires Ordinance for the year 1912.

1.—PROTECTION OF GAME.

I am pleased to report a very noticeable increase in all kinds of game, wild ducks excepted, for the year 1912. The amendment to The Game Act, providing that no female deer, moose or mountain sheep may be killed will undoubtedly result in a further increase in the numbers of these animals.

I regret, however, to report that owing to the settlement of the districts frequented by antelope (thereby reducing their range) the extinction of these beautiful animals will eventually result unless a section of country suitable for them is reserved from settlement. Unsuccessful attempts have been made to rear them in the Dominion parks. I understand, however, that the parks department have secured a section of land in the vicinity of the Red Deer River, north and east of Brooks, for the purpose of establishing an antelope park or game preserve. If this is fenced and one side left open until a suitable season, a drive can undoubtedly be made which, if handled properly, should result in placing a number of these animals in the enclosure. It is believed that no trouble will be found in rearing them in an enclosure situated in the district which they are in the habit of frequenting.

GAME BIRDS.

I regret that with the increase in the numbers of prairie chicken and partridge, illegal shooting increases. In some districts farmers are complaining of the damage caused to grain by chicken. I am of the opinion, however, that the damage is not as great as represented, in fact, in many cases it is hardly noticeable. For at least ten months of the year this bird lives on rose buds, berries, weed seeds, grubs and insects, thereby destroying many of the destructive species of insects and grubs, which would undoubtedly reduce the yield of grain. The partridge is known to feed on insects which are destructive to vegetation, especially trees and shrubs. It would appear to me, therefore, that if no prairie chicken or partridge were killed their services in destroying injurious grubs and insects would more than pay for any damage they may do to the farmer's crop.

FUR BEARING ANIMALS.

Beaver.—As reported in 1911 these animals are still on the increase, considerable damage being reported in the southern portion of the province where small groves or patches of timber exist. In other sections their dams are causing hay meadows to be covered with water. It would appear therefore that at no distant date it will be necessary to declare an open season under very stringent regulations.

Mink, fisher, marten and other fur bearing animals are still reasonably plentiful.

BIG GAME.

The hunting season of 1912 was not as favourable for the big game hunter as that of 1911. There was not sufficient snow until late in the season in many districts to enable the hunter to track the animal which he was hunting.

Returns received from license holders showing the number of animals shot, shows the following result for the years 1907 to 1912 inclusive:

	1907	1908	1909	1910	1911	1912
Antelope	49	45	89	126	101	105
Moose	14	37	86	184	305	425
Caribou	..	..	5	8	30	40
Mountain Sheep	..	..	40	54	49	90
Mountain Goat	..	..	38	46	56	58
Elk	..	..	..	7	..	..
Deer	59	125	299	540	619	768

This of course does not show the total game killed, as very few of the residents in the unorganized districts purchased licenses. The records, however, for game killed south of the 55th parallel are reasonably correct.

BRANDING GAME HEADS.

Section II. of the Act which requires the branding of game heads before buying or selling, shows the following results:

	1907	1908	1909	1910	1911	1912
Mountain Sheep	216	2	9	11	2	6
Mountain Goat	62	..	1	1	1	2
Elk	41	3	4	2	2	1
Moose	39	29	33	32	40	27
Caribou	16	6	6	2	3	6
Deer	142	15	26	26	40	16
Antelope	95	5	..	3	3	4

LICENSES AND PERMITS.

An increased number of licenses and permits were issued in 1912 as against former years. The amendment to the Act requiring the residents of cities, towns and villages to obtain licenses before hunting or shooting game birds, resulted in the sale of 9,519 of these licenses.

The following table shows licenses and permits sold each year:

	1907	1908	1909	1910	1911	1912
General Game Licenses	4	7	17	24	24	28
Bird Game Licenses	..	..	3	3	67	67
Trappers' Licenses	6	4	1	10	14	26
Resident's Big Game	446	529	1,162	1,997	813	1,043
Resident Farmers Big Game	..	..	..	..	2,118	2,917
Resident Bird Game	..	..	..	..	7,462	9,519
Guides' Licenses	6	3	7	8	13	21
Camp Helpers' Licenses	1	1	1	4	5	5
Game Dealer's Licenses	12	23	39	30	16	26
Market Hunter's Licenses	..	..	..	..	60	75
Permits to export	15	17	19	35	24	27
Permits to collect	6	6	16	23	7	7

CONVICTIONS AND FINES.

	1908	1909	1910	1911	1912
For hunting on Sunday	12	4	4	9	..
For hunting in close season	11	36	29	23	6
Buying and selling unbranded heads	8	6	3	1	..
Hunting without a license	7	6	14	17	1
Selling without a license	7	7	..	1	2
Miscellaneous offences	4	2	9	7	71
Taking females	..	..	..	4	..

REVENUE FROM GAME.

The accompanying table brings out some interesting facts about the revenue received in connection with game. By referring to the table it will be found that the revenue exceeded the expenditure for the year 1912 to the extent of $6,692.33, and by comparing the revenue for the years 1906 to 1912 inclusive, with the expenditure for the same years, it will be seen that the revenue from the sale of licenses and permits exceeds the expenditure by $14,792.57. It is therefore demonstrated that a license system which requires hunters and sportsmen to purchase a license before hunting or shooting game, places the protection of game on a self-supporting basis, and should result in an increased revenue each year, with the result that more game guardians can be engaged to better protect the game. It is possible that the revenue from this source will become sufficiently large to warrant the payment of a bounty on animals and birds destructive to game. Of these the coyote and crow are the worst offenders.

REVENUE FROM GAME—MONEYS COLLECTED.

	1906	1907	1908	1909	1910	1911	1912
General Game		$93.00	$175.00	$425.00	$600.00	$600.00	$700.00
Bird Game		......	......	45.00	45.00	335.00	335.00
Trapper's		40.00	40.00	10.00	100.00	140.00	260.00
Resident's Big Game		115.00	1,322.50	2,905.00	4,992.50	2,032.50	2,607.50
Resident Farmer's Big Game		......	......	......	......	2,118.00	2,917.00
Resident Bird Game		......	......	......	......	9,315.00	11,898.00
Guides'		30.00	15.00	35.00	40.00	65.00	105.00
Camp Helper's		2.50	2.50	2.50	10.00	25.00	25.00
Game Dealer's		120.00	230.00	390.00	300.00	160.00	260.00
Market Hunter's		......	......	......	......	300.00	375.00
Permits to export		171.00	92.00	50.00	76.00	41.00	65.00
Permits to collect		65.00	50.00	55.00	45.00	35.00	35.00
Branding		2,158.00	240.00	314.00	295.00	323.00	246.00
Confiscated Game		......	......	104.50	108.75	30.00	45.00
Fines		154.00	337.50	447.50	328.00	700.00	861.00
Total Revenue	$ 145.00	$3,948.50	$2,504.50	$4,793.50	$6,940.25	$16,219.50	$20,734.50
Total Expenditure	$1,929.69	$2,216.62	$4,323.60	$5,579.90	$4,766.20	$8,935.00	$14,042.17
Surplus	....	$1,731.88	....	....	$2,174.05	$7,284.50	$6,692.33
Deficit	$1,784.69	....	$1,819.10	$786.40	....	....	....

TABLE I.—A RETURN SHOWING THE NUMBER AND VALUE OF THE FUR CATCH.

	From Small Dealers			From Wholesale Dealers and Exporters	
	No. of Skins	Average Value	Total Value	No. of Skins	Total Value
Badger	46	$1.00	$46.00	363	$606.75
Bear (Black)	36	12.50	450.00	776	6,720.81
Bear (Brown)	3	8.00	24.00	124	991.20
Bear (Grizzly)	2	10.00	20.00	17	136.00
Bear (Cub)	1	.50	.50	99	535.50
Beaver	..	..	..	566	3,030.40
Coyote	582	3.80	2,211.60	5,204	24,983.61
Fisher	..	..	..	85	1,805.20
Fox (Cross)	10	8.90	89.00	493	5,585.90
Fox (Red)	41	7.00	287.00	966	6,536.25
Fox (Silver)	..	..	..	62	12,927.00
Lynx	60	19.47	1,168.20	2,532	45,814.95
Marten	10	12.40	124.00	2,974	25,168.07
Mink	96	4.90	470.40	3,651	16,413.50
Otter	2	17.50	35.00	296	2,523.00
Muskrat	59,362	.37	21,963.94	302,290	117,423.47
Skunk	64	1.37	87.68	599	866.12
Weasel	4,496	.53	2,382.88	20,463	12,222.17
Wolverine	100	6.00	600.00	102	691.80
Wolf	6	15.00	90.00	66	376.30
			$30,050.20		$285,358.00

TABLE II.—SHOWING ANNUAL FUR CATCH FOR THE YEARS 1907 TO 1912 INCLUSIVE.

	From Small Dealers						From Wholesale Dealers and Exporters					
	1907	1908	1909	1910	1911	1912	1907	1908	1909	1910	1911	1912
Badger	595	360	329	142	163	46	310	252	182	360	150	363
Bear (Black)	285	117	103	68	209	36	1,660	2,173	5,671	1,671	1,160	776
Bear (Brown)	83	24	26	8	34	3	342	300	195	143	112	124
Bear (Grizzly)	28	10	7	8	15	2	127	40	37	15	...	17
Bear (Cub)	44	9	19	22	15	1	100	70	51	140	55	99
Beaver	750	...	85	...	580	...	2,542	1,514	8,495	5,607	3,032	566
Coyote	11,502	11,537	5,765	3,222	1,858	582	5,262	6,404	3,055	4,128	1,897	5,204
Fisher	44	34	16	10	15	...	351	242	155	194	65	85
Fox (Cross)	352	86	19	19	57	10	1,674	910	445	445	391	493
Fox (Red)	1,111	254	89	86	142	41	4,662	1,638	714	865	659	966
Fox (Silver)	216	12	2	2	8	...	411	242	10	111	69	62
Lynx	12,511	1,834	307	222	159	60	42,669	7,778	1,176	802	950	2,532
Marten	11,273	377	157	135	460	10	12,224	9,397	7,378	5,836	6,329	2,974
Otter	472	12	5	...	185	2	423	520	539	500	251	296
Mink	8,053	637	369	412	905	96	7,912	2,685	2,562	3,024	4,591	3,651
Muskrat	159,661	104,811	142,334	234,337	106,708	59,362	119,832	157,493	288,654	671,986	355,512	302,290
Squirrel	1	390	51	...	...	...	...	...	...	...	...	...
Skunk	4,189	268	216	289	284	64	3,914	786	518	432	253	599
Weasel	3,256	4,984	5,889	8,350	9,919	4,496	5,491	7,523	14,643	20,838	17,319	20,463
Wolverine	451	7	4	8	346	100	446	642	495	266	143	102
Wolf	65	23	34	38	30	6	922	237	218	198	270	66
Deer	357	16	1	2	...	...	30	...	...	...	...	...
Moose	17	1	1	3	...	...	...	24	8	...	...	...
Elk	4	...	...	...	...	...	...	17	...	...	...	...
Caribou	...	...	...	...	...	...	...	...	125	11	...	...
Muskox	...	...	...	...	...	...	...	1	127	32	74	...

To those who are interested in the protection of game the close seasons adopted in other places will no doubt be of interest. The following tables give the desired information for the year 1912:

TABLE III.—OPEN SEASON FOR GAME BIRDS IN VARIOUS STATES AND PROVINCES.

STATES	SHARP-TAILED GROUSE (Prairie Chicken) RUFFLED GROUSE (Partridge)	DUCK
Maine	Sept. 15 to Dec. 1	Sept. 1 to Dec. 16.
New Hampshire	Oct. 1 to Dec. 1	Oct. 1 to Dec. 16.
Vermont	Sept. 15 to Dec. 1	Sept. 1 to Dec. 16
Massachusetts	Oct. 12 to Nov. 13	Sept. 15 to Jan. 1.
Rhode Island	Nov. 1 to Jan. 1	Aug. 15 to Dec. 16.
Connecticut	Oct. 8 to Nov. 24	Sept. 1 to Dec. 16.
New York	Oct. 1 to Dec. 1	Sept. 16 to Dec. 16.
Pennsylvania	Oct. 15 to Dec. 1	Sept. 1 to Dec. 16.
Delaware	Nov. 15 to Jan. 1	Oct. 1 to Jan. 16.
Maryland	Nov. 1 to Dec. 25	Nov. 1 to Feb. 1.
Virginia	Nov. 1 to Feb. 1	Oct. 15 to Feb. 1.
West Virginia	Oct. 15 to Dec. 1	Sept. 1 to Jan. 16.
Kentucky	Nov. 15 to Jan. 1	Aug. 15 to Apr. 1.
Ohio	To Nov. 15, 1915	Sept. 1 to Dec. 2.
Michigan	Oct. 1 to Dec. 1	Sept. 1 to Dec. 16.
Indiana	Nov. 10 to Dec. 21	Sept. 1 to Dec. 16.
Illinois	To July 2, 1920	Sept. 2 to Dec. 16.
Wisconsin	Sept. 10 to Dec. 1	Sept. 1 to Dec. 16.
Minnesota	Oct. 1 to Dec. 1	Sept. 7 to Dec. 1.
Iowa	Nov. 1 to Dec. 15	Sept. 1 to Dec. 16.
Missouri		Sept. 15 to Jan. 16.
Kansas	Oct. 1 to Nov. 2	Sept. 1 to Dec. 16.
Nebraska	Sept. 1 to Dec. 1	Sept. 1 to Dec. 16.
South Dakota	Sept. 10 to Oct. 10	Sept. 10 to Dec. 16.
North Dakota	Sept. 7 to Nov. 2	Sept. 7 to Dec. 16.
Montana	Oct. 1 to Nov. 1	Sept. 1 to Dec. 16.
Wyoming	Sept. 15 to Dec. 16	Sept. 1 to Dec. 16.
Colorado	Aug. 15 to Oct. 11	Sept. 1 to Dec. 16.
Florida		Oct. 1 to Jan. 16.
Alabama	Dec. 1 to Dec. 15	Sept. 1 to Jan. 16.
Mississippi		Sept. 1 to Jan. 16.
Tennessee	Nov. 1 to Mar. 1	Oct. 1 to Jan. 16.
Louisiana		Oct. 1 to Jan. 16.
Oklahoma		Aug. 15 to May 1.
New Mexico	Sept. 1 to Nov. 16	Sept. 1 to Dec. 16.
Arizona		Sept. 1 to Dec. 16.
California	Sept. 1 to Dec. 1	Oct. 1 to Jan. 16.
Nevada	Oct. 1 to Dec. 16	Sept. 15 to Jan. 16.
Utah	Oct. 6 to Oct. 16	Oct. 1 to Jan. 1.
Idaho	Aug. 15 to Dec. 1	Sept. 1 to Dec. 16.
Washington	Oct. 1 to Dec. 1	Oct. 1 to Jan. 16.
Oregon	Oct. 1 to Nov. 1	Nov. 1 to Dec. 16.
Alaska	Sept. 1 to Mar. 2	Sept. 1 to Mar. 2.
PROVINCES		
British Columbia	Sept. 15 to Apr. 1	Sept. 15 to Apr. 1.
Yukon	Sept. 1 to Mar. 15	Aug. 10 to June 1.
Alberta	Oct. 1 to Nov. 1	Aug. 23 to Jan. 1.
Saskatchewan	Sept. 16 to Nov. 16	Sept. 15 to Jan. 1.
Manitoba	Oct. 1 to Oct. 20	Sept. 1 to Dec. 1.
Ontario	Oct. 15 to Nov. 16	Sept. 1 to Dec. 16.
Quebec	Sept. 1 to Dec. 15	Sept. 1 to Mar. 1.
New Brunswick	Sept. 15 to Dec. 1	Sept. 1 to Dec. 2.
Nova Scotia	Oct. 1 to Nov. 1	Sept. 1 to Mar. 1.
Prince Edward Island		Aug. 20 to Jan. 1.
Newfoundland	Sept. 20 to Jan. 1	Sept. 20 to Jan. 1.

TABLE IV.—OPEN SEASON FOR BIG GAME IN VARIOUS STATES AND PROVINCES.

STATES	DEER	ELK	MOOSE	ANTELOPE	SHEEP AND GOAT
Maine	Oct. 1 to Dec. 16		Nov. 1 to Dec. 1		
New Hampshire	Oct. 1 to Dec. 16				
Vermont	Oct. 10 to Dec. 2				
Massachusetts	Nov. 17, 1923				
Connecticut	June 1, 1917				
New York	Oct. 1 to Nov. 16				
New Jersey	Nov. 1 to Nov. 6				
Pennsylvania	Nov. 10 to Nov. 26				
Virginia	Sept. 1 to Dec. 1				
West Virginia	Oct. 15 to Dec. 1				
Kentucky	Sept. 1 to Mar. 1				
Michigan	Nov. 10 to Dec. 1				
Illinois	To June 23, 1923				
Wisconsin	Nov. 11 to Dec. 1				
Minnesota	Nov. 10 to Nov. 30		Nov. 10 to Nov. 30		
Iowa					
Missouri	Nov. 1 to Jan. 1				
South Dakota	Nov. 1 to Dec. 1				
North Dakota	Nov. 10, 1916				
Montana	Oct. 1 to Dec. 1	Oct. 1 to Dec. 1			Oct. 1 to Dec. 1.
Wyoming	Oct. 1 to Nov. 1	Sept. 1 to Nov. 16	To Sept. 1, 1918		
Colorado	Oct. 1, 1918				
South Carolina	Sept. 1 to Jan. 1				
Georgia	Oct. 1 to Dec. 1				
Florida	Nov. 1 to Feb. 1				
Alabama	Nov. 1 to Jan. 1				
Mississippi	Nov. 15 to Mar. 1				
Tennessee	To Oct. 1, 1915				
Arkansas	Sept. 1 to Feb. 1				
Texas	Nov. 1 to Jan. 1				
Oklahoma	Nov. 15 to Dec. 15				
New Mexico	Oct. 1 to Nov. 16				
Arizona	Oct. 1 to Dec. 16				

California	July 1 to Sept. 1				
Nevada	Oct. 15 to Nov. 16				
Utah	Oct. 1 to Oct. 16				
Idaho	Sept. 1 to Dec. 1	Sept. 1 to Dec. 1			Sept. 1 to Dec. 1.
Washington	Oct. 1 to Dec. 1		Oct. 1, 1925	Sept. 15 to Nov. 1	Oct. 1 to Dec. 1.
Oregon	Aug. 1 to Nov. 1				
Alaska	Aug. 15 to Nov. 2		Aug. 20 to Jan. 1		Aug. 20 to Jan. 1.
PROVINCES					
British Columbia	Sept. 1 to Dec. 16		Sept. 1 to Jan. 1		Sept. 1 to Nov. 15.
Yukon	Sept. 1 to Mar. 1	Sept. 1 to Mar. 1	Sept. 1 to Mar. 1		Sept. 1 to Mar. 1.
Alberta	Nov. 1 to Dec. 15		Nov. 1 to Dec. 15	Oct. 1 to Nov. 1	Sept. 1 to Oct. 15.
Saskatchewan	Nov. 15 to Dec. 1	Nov. 15 to Dec. 1	Nov. 15 to Dec. 1	Oct. 1 to Nov. 15	
Manitoba	Dec. 1 to Dec. 15	Dec. 1 to Dec. 15	Dec. 1 to Dec. 15	Dec. 1 to Dec. 15	
Ontario	Nov. 1 to Nov. 16		Oct. 16 to Nov. 16		
Quebec	Sept. 1 to Jan. 1		Sept. 1 to Jan. 1		
New Brunswick	Sept. 15 to Dec. 1		Sept. 15 to Dec. 1		
Nova Scotia	To Oct. 1, 1915		Sept. 16 to Nov. 16		
Newfoundland					

GAME GUARDIANS BY CONSTITUENCIES.

Alexandra.

GAME GUARDIANS	ADDRESS
Moore, D. H.	Islay.
Carter, J. R.	Beaver Lodge.
Pound, L. L.	Ribstone.
Avery, Walter	Vermilion.
Shanks, W. K.	Bashaw.
Campbell, Stuart F.	Kitscoty.
Lamont, Robert Henry	Greenglade.
Maddex, J.P., Wm.	Greenlawn.

Athabasca.

Biggs, Wm.	Fort McMurray.
Loutit, Peter	Fort Chipewayn

Camrose.

Dempsey, J. G.	Heather Brae.
Fleming, A. W.	Ohaton.
Mohler, Wm.	Round Hill.
Mickleburgh, A.	Spilstead.
Pithouse, H. G.	New Sarepta.
Spilstead, Jas.	Spilstead.
Wilson, O. T.	Camrose.
Kezar, C. F.	Ferintosh.
Battram, Thos.	New Serepta.
Kunke, F.	Ferintosh.
Welles, W. D.	Daysland.
Griffis, H. H.	Daysland.
Bailey, C. Stanley	Camrose.
Neveu, Jas.	New Norway.
Neveu, Joseph	New Norway.
Yates, Wm.	Duhamel.
Wendt, W. F.	Edberg.
Brooks, M. W.	Bittern Lake.

Calgary.

Beveridge, S. E.	Box 1650, Calgary.
Campbell, D. W.	Calgary.
Grahame, G. M.	Calgary.
Wheeler, A. D.	Calgary.
Oswald, J. C.	334 11th St., Calgary.
Dippie, G. F.	218 8th Ave. W., Calgary.
MacKay, W. G.	218 8th Ave. W., Calgary.
Martin, Fred R.	231 8th Ave. E., Calgary.
Martin, Alex	231 8th Ave. E., Calgary.
Kennerly, L. H.	Box 1234, Calgary.
Revine, A.	care F. Martin, 231 8th Ave. E., Calgary.
Saunders, Wm. S.	Box 207, Calgary.
McLaren, Ben	Calgary.

Cardston.

Brown, John Geo.	Waterton Mill.
Sloan, Jno.	Kimball.
Tolley, Wm. F.	Mountain View.
Cooper, Moses R.	Waterton Lakes.
O'Brien, F. J.	Raymond.
Turner, Fred H.	Magrath.
Heathershaw, Geo.	Magrath.
Danielson, Carl	Cardston.

Claresholm.

Lyndon, Wm.	Lyndon.
Ross, D. M.	Monarch.
Miller, J. W.	Carmangay.
Smith, Percy A.	Granum.

Cochrane.

Abell, F. H.	Cochrane.
Bell, E. L.	Lochend.
Fraser, J. A. W.	Jumping Pond.
Graham, Wm.	Dog Pond.
Grayson, Chas.	Cochrane.
Johnston, Geo. W.	Cochrane.
Meiklejon, R. W.	Cochrane.
McLeod, Geo.	Dog Pond.
Robinson, R. C.	Calgary.
Skinner, D. W.	Sampsonton.
Thompson, E. A.	Dog Pond.
Edwards, Cecil	Glenbow.
Butler, Robt.	Box 154, Cochrane.
Farr, Leslie	Airdrie.
Spooner, J. A.	Kew.
Baptie, Adam M.	Exshaw.
Davey, Wm. C.	Airdrie.
McDougall, Jno. B.	Morley.
Reid, Geo. A.	Bottrel.
James, Thos.	Box 268, Cochrane.
Willis, Jos.	Box 296, Cochrane.
Hultgren, Chas.	Crossfield.
Forbes, H. D.	Simons Valley.
Alfrey, J. E.	Big Prairie.

Didsbury.

McLeod, John	Sunny Slope.
McIntyre, Wm.	Didsbury.
Godden, Edwin	Tapscot.
Shantz, David S.	Didsbury.
Shantz, L. N. R.	Carstairs.
James, C. S.	Acme.
White, Fred B.	Swalwell.
Walker, T. A.	Carbon.
Hunter, M. E.	Swalwell.

Edmonton.

Blackburn, B. F.	646 1st St., Edmonton.
Bulmer, Geo.	724 Ottawa, Edmonton.
Cooper, W. H.	18 Arlington Aprt. Edmonton.
Carpenter, J. V. E.	131 Jasper W. Edmonton
Mercer, J. B.	212 Jasper E. Edmonton.
Robertson, W. S.	Sheriff's Office, Tegler Blk., Edmonton.
Rudd, H. E.	375 Kirkness, Edmonton.
Turnbull, Hugo	Edmonton.
McEchern, Donald	276 York St., Edmonton.
Smith, Robert	Edmonton.
Morris, H. G.	318 Queens, Edmonton
Jellett, J. St. George	344 Jasper E. Edmonton.
McKenzie, K. B.	care Ross Bros., Edmonton.
Thom, J. M.	23 Jasper W., Edmonton.
Chambers, P. A.	777 First St., Edmonton.
Blackwood, Chas.	Cor. Woodward & Hastings Sts., Edmonton.
Steckle, Norman	622 Isabella, Edmonton.

McCallum, Donald	218 Elizabeth, Edmonton
Sutherland, George	1346 Victoria Ave., Edmonton.
Umbach, John H.	Box 291, Edmonton.
Wilson, G. S.	Cor. 9th & McKenzie, Edmonton.
McFadyen, A. C.	Box 1558, Edmonton.
Brown, G. L.	543 13th St., Edmonton.
Cox, R. H.	141 McDougall, Edmonton.
Peterson, Robt. A.	704 1st St., Edmonton.
Riggs, W. A.	care Sommerville Hrde. Co., Edmonton.
Simpson, E. H.	233 Jasper East, Edmonton.
Bell, Sydney Wm.	care 24th St. Grocery, Edmonton.
Stanford, Chas. R.	care Northern Club, Edmonton.

Gleichen.

Bunny, B. H.	173, Bassano.
Brereton, David	Red Deer, Gleichen.
Brown, W. W.	Strathmore.
Martin, Dan, Jr.	Rosebud Creek.
Clark, John, Jr.	Gleichen.
Bruce, Edward M.	Cluny.
Service, William	Gleichen.
Slude, David	Dorothy.
Robson, R. B.	Strathmore.
Nathan, J. H.	Beiseker.
Lincoln, Arthur G.	Langdon.
Aylward, J. B.	Hillhurst, Calgary P. O.
Binns, J. H.	Brooks.
Bond, Geo. B. R.	Bassano.
Hames, W. A. W.	Bassano.
Ross, R. C.	Cluny.

High River.

Dunlop, Wm. A.	High River.
Estcourt, Wm. H.	Pekisko.
Gervais, Romain	Loma.
Brown, S. J.	Aldersyde.
Riddle, D. M.	Baronet.
Kuck, Fred	Pekisko.
Baker, E. R.	Pekisko.
Jones, Herbert	Tongue Creek.

Innisfail.

Archer, F. W.	Innisfail.
Faris, Jas., Jr.	Trenville.
Milligan, R.	Pine Lake.
Mustard, H. M.	Markerville.
Robinson, Edmund	Little Red Deer, Innisfail
Robinson, J. K.	Little Red Deer, Innisfail
Scott, Wm. L.	Markerville.
Thaw, Guy	Raven.
Major, Donald	Stauffer.
Muir, B. A.	Prairie Grange.
Thompson, Frank	Innisfail.
Sanborn, J. E.	Innisfail.
Tatham, Cyril H.	Stauffer.
Scott, N.	Stauffer.
Bower, Len D.	Caroline.
Haron, R. B.	Pine Lake.
Stevenson, James	Raven.

Lac Ste. Anne.

Musselman, D.	Onoway.
Maloney, J. V.	Roydale.
White, Henry	Wabamun.
Swift, J.	Lac Ste. Anne.
Braithwaite, Geo.	Rexboro.
Stansell, S. S. S.	Onoway.

Lacombe.

Brerton, T. A.	Clive.
Boyd, A. J.	Lacombe.
Capron, Jos.	Blackfalds.
Carritt, J. C.	Bentley.
McPherson, W. B.	Bentley.
Pinnell, Chas.	Alix.
Smith, Wm.	Lockart.
Stephens, Fred	Lacombe.
Triplett, J. E.	Forshee.
Waghorn, W.	Blackfalds.
Evans, H. J. Angell	Lacombe.
Miller, Leroy	Lacombe.
Kent, Jas. P.	Lacombe.
Parlby, Walter	Alix.
Allison, Edwin	Content.
Reid, Wm.	Lacombe.
De Groff, G. A.	Bentley.
Murdoch, J. D.	Lamerton.
Wheatley, Fred	Tilly.

Leduc.

Blades, W. F.	Leduc
Brissard, Jos.	Box 152, Leduc.
Clifford, F.	Conjuring Creek
Erwin, Jonah	Leduc.
Green, F. B.	Bonnie Glen.
O'Mara, E.	O'Mara
Sanders, Nels A.	Thorsby.
Ohrn, Carl Herbert	Ohrnville.
Sahlstorm, Walter	Thorsby.
Stromsen, S. M.	Yule Meadow.
Baker, R. C.	Leduc.
Piggett, Ben	Calmar.
Vanalstyne, J. H.	Telfordville.
Blades, Jas.	Millet
Postle, Leonard	Calmar.
Allan, Harry	Stone's Corners
Billsborrow, Wm.	Leduc.
Brown, Chas., Jr.	Telfordville
Sprivdlee, W.	Barrymoor.

Lethbridge.

Case, H.	Lethbridge.
Withers, H. E.	Lethbridge.
Agnew, F. R.	Box 1375, Calgary.
McDonald, Dougall Ewen	Lethbridge.
McAloney, Robert F.	Bow Island.
Layton, S. J.	Taber.
Wright, B. W.	Taber.
Ostlund, Gustav	Stirling.
Crabb, S. A. B.	Barnwell.
Lomas, George	Bow Island.
Olander, C. G.	524 Westminster Road, Lethbridge.
Miller, Manley L.	Stirling.
O'Brien, T. J.	Raymond.

Medicine Hat.

Bray, J. H. G.	Box 417, Medicine Hat.
Murray, Geo.	Seven Persons.
Rutherford, Wm.	Elkwater.
Rutherford, R.	Irvine.
Armstrong, Peter R.	Elkwater.
Robinson, Jas.	Josephsburg.
Boyd, Robt.	Box 491, Medicine Hat.
Murray, J. B.	Seven Persons.
Newby, Herbert Sutton	Irvine.
Clarke, Maurice T.	Eagle Butte.
Bishop, Jesse	Medicine Hat.
Stevens, H J.	Carlstadt.
Whiffin, Hartley A.	Suffield.
Caven, Henry	Dunmore.
Webster, E. C.	Medicine Hat.
Lamarsh, Peter	Winnifred.
England, Elmer	Carlstadt.

Macleod.

Cochlin, John	Macleod.
Pearson, G.	Standoff.
Roberts, P. J.	Macleod.
McNab, R. B.	Macleod.
Stockton, Jas. H.	Macleod.
Grant, J. A.	Macleod.
Kortright, P. F.	Macleod.

Nanton.

Carmicheal, W. A.	Champion.
Schuler, N. B.	Schuler.

Okotoks.

Buckler, Eric W.	Black Diamond.
May, E. G.	Elbow River R. R., No. 2 Calgary.
Craig, F.	Midnapore.
Grant, John A.	Black Diamond.
Pomery, P. M.	Priddis.
Robinson, J.	Pirmez Creek.
Livingstone, G.	Bragg Creek.
Shaw, Hugh K.	Midnapore.
Hone, A.	Midnapore.
Thompson, Geo.	Okotoks.
Allen, L.	Okotoks.
Murray, P. H.	Okotoks.
Young, Edwin H.	De Winton.

Olds.

Byron, Thos.	Eagle Hill, Olds.
Distman, A. C.	Trochu Valley.
Starken, Swan	Garrington.
Thompson, Colin	Red Lodge.
Thompson, Evan	Red Lodge.
Logan, N. W.	Olds.
Grant, J. E.	Olds.
McKim, H. H.	Bowden.
Barathy, Sidney de	Trochu.
Shenfield, E. W.	Bowden.
Durant, Harry	Trochu.
Brewster, J. I.	1202 Broadview Boulevard, Calgary.
Hoare, G. R.	Bowden.
Sackrider, S. F.	Bearberry.
Bird, Frederick	Sundre.
Niddrie, Fred J.	Mound.

Peace River.

English, W. S. C.	Spirit River.
Gaudet, Jno. P.	Peace River Crossing.
Monkman, Alex	Grand Prairie.
McDonald, Duncan	Dunvegan.

Pembina.

Clarke, T. A.	Pembina.
Cosens, F.	Sion.
Romeo, Jos. R.	Peavine.
Mennier, T.	Mosside.
Lucas, Arthur	Clyde.
Maier, Wm. G.	Sunniebend.
Barton, Robt.	Mosside.
Mathews, Wm.	Glenister.
Stokes, S. D.	Fawn Lake.
Gregor, J. M.	Eastburg.
Bray, Wm. B.	Greencourt.
Edgson, Jno. A.	Edison.
Carr, Claude S.	Sunniebend.

Pakan.

Shortridge, G. W.	Caskeyville.
Yealands, Geo.	Pakan.
Veillett, Geo. E.	Veillett.
Duquette, M. J.	St. Paul De Metis.
Vezeau, E. D.	Bonnyville.
Benerlin, Chas.	St. Paul De Metis.
Amsden, Roy C.	Elk Point.
Des Pius, Lewis Nap	Brosseau.
Cordingly, R. C.	Flat Lake.
Limoges, J. H.	Cold Lake.
Oakes, Fred	Veillette.
Widel, D. A.	Flat Lake.
Storach, Geo.	Abilene.
Ploof, Frank	Elk Point.
Amsden, A. C. M.	Elk Point.

Pincher Creek.

Garrault, L.	Pincher Creek.
Porter, Geo. E.	Livingstone.
Willcock, D. E. W.	Pincher Creek.
Riviere, Henry	Pincher Creek.
Dennis, Wilson	Maycroft.
Willdigg, Thos. S.	Maycroft.
O'Molly, Harold	Cowley.

Ponoka.

Craig, B. F.	Bluff Centre.
Everts, Jas.	Wittenburg.
Fleming, Louis	Ponoka.
Fraser, A. B.	Ponoka.
Schoonr, Jno.	Ponoka.
Stewart, P. R.	Earlville.
Davidson, A.	Buckhorn.
Beeley, J. H.	Rimbey.
Webster, O. L.	Ponoka.
Fagen, M. A.	Water Glen.
Craft, O. O.	Asker.
Allan, Rolla B.	Chesterwold.
Aldridge, C. D.	Wittenburg.

Red Deer.

Bleay, Richard	Red Deer.
Cottinghamn, W. H.	Red Deer.
Fisher, F. B.	Red Deer.
Kendall, J. S.	Red Deer.
Mellor, C. P.	Red Deer.
Wallace, Jos.	Red Deer.
Pearson, Wm. H.	Red Deer.
McDonall, G. H.	Pitcox.
Thorkman, Thos.	Eckville.
Towioanen, Peter	Eckville.
Rutter, C. J.	Sylvan Lake.

Rocky Mountain.

McDougall, D.	Banff.
Robertson, Robert	Banff.
Sibbald, H. E.	Banff.
Bevan, Jack	Banff.

Strathcona.

Ellett, F. S.	Sandy Lake, Strathcona
Inkster, Jas.	Strathcona.
Lackey, Hamilton	East Clover Bar.
McLaggon, J. W.	Strathcona.
Tipton, J. W.	Strathcona.
Dunn, J. A.	Strathcona.
Murphy, C. H.	Strathcona.
Shields, W. K.	Strathcona.
Smith, J. E.	Strathcona.
Stephens, W. H.	Strathcona.
Wilkinson, W. F.	Clover Bar.
Cleland, J. G.	Ardrossan.
Bremner, J. C. C.	Clover Bar.

Sedgewick.

De Bord, J. W.	Amisk.
Lyall, Chas. F.	Strome.
Matusch, A. B.	Amisk.
McDonald, J. S.	Sedgewick.
De Pass, F.	Strome.
Reid, Elmer	Harland.
Robson, T. S.	Killam.
Ward, M. H.	Sedgewick.
Rae, J. D.	Chinook.
Gillman, Thos. Herbert	Vallejo.
Schnider, Felix Chas.	Rosenheim.
Purdy, Edwin Brewer	Sounding Lake.
Evans, Thos. Jas.	Provost.
Roderick, John Jas.	Cairns.
Farquharson, Alexander	Eye Hill.
Bogg, Andrew A.	Hughenden.
Gerrier, Wm.	Metiskow.
Wardner, Geo. J.	Provost.
Beesley, C. W.	Provost.
Collins, D. S.	Youngstown.
Brodie, Neil	Clemens.
Jell, R. W.	Coronation.
Loades, G. A.	Viking.
Legate, Robert P.	Cadogan.
Maley, A. F.	Coronation.
Foss, M. F.	Stoppington.
Desso, John Chas.	Fairacres.
Murphy, Henry A.	Consort.
Clysdale, T. E.	Tyrol.
Miller, E.	Strome.

St. Albert.

Kelly, Patrick	St. Albert.
Verstracte, Camille	Velleneuve.
Gagnon, Sam	St. Albert.
Chave, Jules	St. Albert.
Jenkins, G. H.	Seymour.

Stettler.

Barrett, E. W.	Kanats.
Brace, Henry	Britain.
Critchley, H. D.	Red Willow.
Ducloy, Chas. E.	Content.
Grose, J. C.	Erskine.
Gray, W. B.	Stettler.
Norton-Taylor, S.	Hand Hills.
Ricketts, E. R.	Castor.
Longson, H.	Stettler.
Cope, G. R.	Hanna.
Blades, R. H.	Gadsby.
Berry, Edgar	Halkirk.
McKay, D. J.	Munson.
Brown, G. L.	Empress.
Gibbons, Oliver	Erskine.
Webb, Geo. S.	Erskine.
Malott, L. A.	Lake Thelma.
Moyer, John H.	Munson.
Russell, Jas.	Munson.
Wilson, J. A.	Hand Hills.
Whiteoak, Jas. B.	Steveville.
Dorland, Sydney L.	Castor.
Runn, J. B.	Garden Plains.
Matthias, E. H.	Castor.

Stoney Plain.

Butchart, J. B.	Inga.
Bennett, Jno.	Keephills.
Currie, Chas.	Graminia.
Deans, S. J.	Brightbank.
Groat, E. A.	Spruce Grove Centre.
Kuhl, Henry	Golden Spike.
MacGillycuddy, V. J.	Stoney Plain.
McDonald, Dan	Mewassin.
Pinchbeck, E.	Winterburn.
Jenkins, F. J.	Tomahawk.
McKinley, Murd	Stoney Plain.
Jasperson, Andrew	Stoney Plain.
Sims, Elmer	Inga.
Reid, Jas.	Manly.
Umbach, Israel	Stoney Plain.
Estock, Jas.	Inga.
Mills, Fred S.	Onoway.
Porter, Geo. R.	Keephills.
Atkinson, B. W.	Spruce Grove Centre.
Bates, Arthur E.	Inga.

Sturgeon.

Bailey, R.	Namao.
Gibbons, W. R.	Battenburg.
June, Robt.	Namao.
Kennedy, Jno.	1273 Jasper E. Edmonton
Milligan, John	New Lunnon.
Mason, Wm.	Bon Accord.
Russell, John	Athabasca Landing.
Trotter, J. R.	Lamoreux.
Whiteley, Wm. E.	Landing Road Edmonton

Watt, W. W.	Northbank.
Florence, A. S.	Fedorah.
McLaughlin, C.	Cardiff.
Walker, C. A.	Athabasca Landing.
Saunders, Wm. S.	Stocks.
Henry, F. J.	Pine Creek.

Vegreville.

Cockson, Geo., Jr.	Tofield.
Gully, Lacy	Vegreville.
George, A. H.	Lavoy.
Loades, G. A.	Viking.
Lavoy, Jos.	Lavoy.
Norn, Jos. A.	Logan.
Roberge, C. C.	Logan.
Shandro, A. S.	Shandro.
Stewart, J. A.	Mundare.
Trimble, John	Vegreville.
Watson, Andrew	Chipman.
Wynn-McKenzie, E. H.	Warwick.
Gladens, Augustus	Box 11, Tofield.
Lynn, Percy E.	Warwick.
Calvert, S. W.	Chipman.
Moody, A. R.	Beaver Lake.
Stewart, R.	Whiteford.
McCallum, J. S.	Mundare.
McVittie, G. E.	Holden.
Stewart, Geo.	Vegreville.
Nelson, C. E.	Ryley.
Ewanchuk, Stifan	Whiteford.
Morrison, J. C.	Bathgate.
Whyte, George	Holden.

Vermilion.

Armitage, W. H.	Mannville.
Booher, Noah	Mannville.
Graham, J.	Vermilion.
Philbrick, D. L.	Myrnam.
West, F. V.	Vermilion.
McColman, D. C.	Innisfree.
Good, W.	Vermilion.
Campbell, A.	Innisfree.
Berry, D. J.	Vermilion.
Bergey, L. D.	Naughton Glen.
Burnham, Asa A.	Viking.
McFarlane, Robt.	Minburn.
Swift, T. W.	Magin.
Brimacombe, M. A.	Vermilion.
Charlton, Dave	Mannville.
Good, A. E.	Vermilion.
Pitman, Wm.	Innisfree.

Victoria.

Krebs, Johan	Fort Saskatchewan.
Libbey, J. J.	Fort Saskatchewan.
Simmons, E.	Fort Saskatchewan.
Coford, A. W.	Lamont.
Nemirsky, Theo.	Wostok.
Kittlitz, Ed.	Bruderheim.
Reid, J. H.	Lamont.
Minnie, Robt. H.	Andrew.

Wetaskiwin.

Barnard, A. H.	Wetaskiwin.
Dickson, A. R.	Wetaskiwin.

Cherrington, R. R.	Wetaskiwin.
Swanson, C. H.	Wetaskiwin.
Wood, A. G.	Wetaskiwin.
Wilcher, John G.	Lewisville.
Young, R. C.	Millet.
Stilfox, Henry	Morningside.
Larson, Ludvik C.	Minnihik.

II.—PREVENTION OF PRAIRIE FIRES.

I am pleased to report that in 1912 there were very few destructive fires. Owing to the wet season extending well into the fall no fires of any consequence were reported. Although there was an increase in the number of convictions as against 1911 this can be accounted for by the more active enforcement of the provisions of The Prairie Fires Ordinance. The number of convictions secured and the penalties imposed for the years 1907 to 1912 inclusive, are as follows:

Year.	No. of convictions reported.	Total fines.	Average fine.
1907	33	$ 741.00	$22.45
1908	105	1,570.00	14.95
1909	94	1,796.00	19.10
1910	247	4,247.38	17.20
1911	33	565.00	18.25
1912	56	1,008.00	18.00

The following is a list of the voluntary fire guardians in the province arranged by constituencies:

FIRE GUARDIANS	ADDRESS
Alexandra.	
Roberts, Ben	Kitscoty.
Sheridan, T. F.	Wainwright.
Tonkin, E. A.	Dewberry.
Wilson, R. A.	Dewberry.
Skinner, F.	Dewberry.
Websdale, C.	Dewberry.
East, C.	Greenlawn.
Babcock, Edward S.	Lea Park.
Calgary.	
Carter, D.	Calgary.
Campbell, Dan W.	Calgary.
Grahame, G. M.	Calgary.
Johnston, Geo.	Calgary.
Moss, Sidney H.	Calgary.
Moss, Walter	Calgary.
McIntosh, J.	Calgary.
McIntyre, R. W.	Calgary.
Thompson, W. A.	Calgary.
Wheeler, A. O.	Calgary.
Woolliams, W. D.	Calgary.
Camrose.	
Barber, Jno.	Iron Creek, Spring Lake.
Bowie, Geo.	Ferry Point.
Hodgson, Francis J.	New Serepta.
Johnston, Chas.	Edberg.
Roper, Ernest	Bittern Lake.

Cochrane.

Bell, E.	Bradbourne.
Croxford, W. H.	Airdrie.
Elliott, Walter B.	Cochrane.
Fry, Herbert	Cochrane.
Goddard, Gilbert E.	Mitford.
Grahame, Wm.	Bradbourne.
McPhee, M.	Beaver Dam, Cochrane.
Dixon, R. I.	Crossfield.
Reid, Geo. A.	Cochrane.
Stevenson, Johnston	Airdrie.
Sutherland, Jas. A.	Crossfield.
Urquhart, Wm.	Crossfield.
McLeod, Geo.	Crossfield.
Crowe, Walter	Horse Creek.
McDougall, J. B.	Morley.

Claresholm.

Lyndon, W. A.	Lyndon.

Cardston.

Ashe, Percy G.	Coutts.
Shaw, V. S.	Cardston.

Didsbury.

Evans, Arthur	Three Hill.
McLeod, Jno.	Sunnyslope.
Shantz, J. D.	Didsbury.
White, Fred B.	Swalwell.

Edmonton.

Hayes, J. O'Neill	Edmonton.
Mitchell, Arch.	Edmonton.
Tough, Jas.	Edmonton.
Turnbull, Hugo	Edmonton.
McEchern, Donald	Edmonton.

Gleichen.

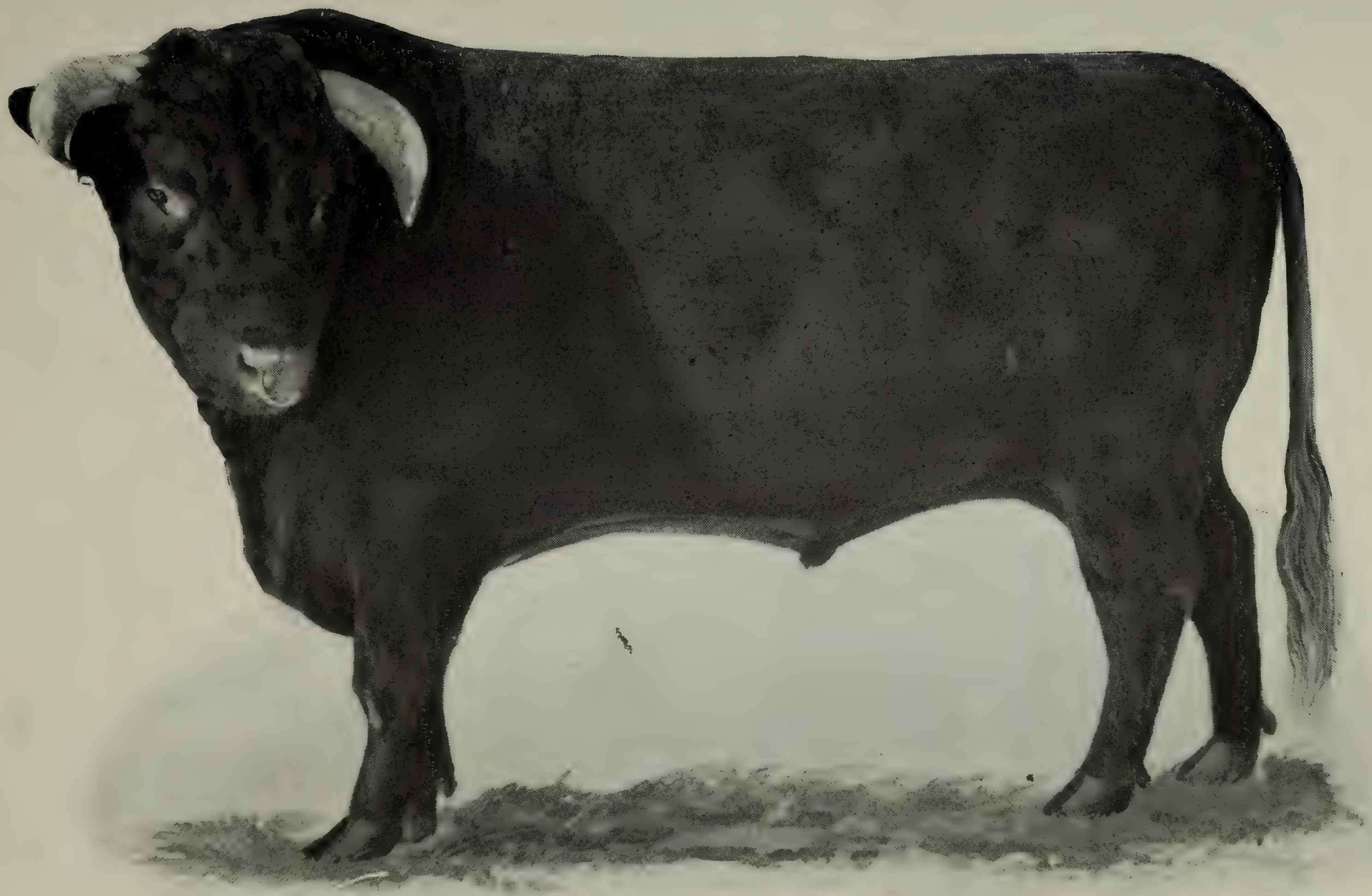
Brown, W .W.	Strathmore.
Clark, John, Jr.	Gleichen.
Colquhon, O. G.	Gleichen.
Code, John B.	Dorothy.
Hicks, Thos.	Lathom.
Hardwick, Douglas	Snake Valley, Gleichen.
Lawson, Jas.	Dorothy.
Maloney, A. S.	Dunbow.
Martin, Dan, Sr.	Gleichen.
McKinnon, L.	Langdon.
Strange, Alex.	Gleichen.
Scott, Harry	Gleichen.
McDuffee, E. N.	Dorothy.
Bunny, Brice H.	Bassano.

High River.

Gervais, Romain	Loma.
Holmes, W. E.	High River.
Thorne, Wilfred B.	Aldersyde.
Carle, Richard P.	Pekisko.

Innisfail.

Alford, R. P.	Pine Lake.
Bitton, Wm. Shirley	Knee Hill Valley, Innisfail.



No. 5.—BUTTERFLY KING (IMP.)
Dairy Shorthorn Bull at the head of the Shorthorn Herd, Demonstration Farm, Claresholm.

Collins, Harry F.	Pine Lake.
Duncan, Geo.	Innisfail.
Ellis, Geo. W.	Innisfail.
Fleming, Geo.	Penhold.
Gaetz, Fred W.	Pine Lake.
Morton-Bell, R.	Trenville.
Mustard, H. M.	Markerville.
Wynn, Robt.	Knee Hill.

Lethbridge (City.)

Duff, Duncan	Lethbridge.
Fuller, Jas. Dixon	Lethbridge.
Kennedy, Edward	Lethbridge.
Link, Adam	Lethbridge.
Nash, A. C.	Lethbridge.

Lethbridge (District.)

Cox, E.	Grassy Lake.
Depew, Warren	Raymond.
Furman, Jno.	Grassy Lake.
Kenny, E.	Pothole, Lethbridge.
McCarty, C.	Raymond.
Otatt, O. H.	Optic.
Slawson, D. K.	Burdette.
Steed, Frank O.	Stirling.
Scott, O. J.	Sweet Valley.
Jones, Elmer	Sundial.
Connor, W. F.	Sundial.
Thwaites, Robt.	Sundial.
Doan, R.	Barney.

Leduc.

Blocker, Wm.	Leduc.
Bradner, Henry	Leduc.
Clifford, Frank	Conjuring Creek.
Fetherston, S. W.	Leduc.
Johnston, S. H.	Beaumont.
Mortimer, Chas.	Leduc.
McEwan, J.	Conjuring Creek.
Ohrn, C. H.	Ohrnville.
Sanders, Nels A.	Ohrnville.

Lacombe.

Burns, Ed.	Lamerton.
Burgess, Jas.	Lamerton.
Capron, Jos.	Blackfalds.
Grose, W. E.	Clive.
Hickling, Horase	Alix.
Hilstad, Carl	Bentley.
Murphy, H. A.	Lacombe.
Paisley, S. W.	Canyon.
Pinnell, Chas.	Alix.
Richards, Albert T.	Lacombe.
Tees, James	Clive.
Tees, W. E.	Tees.
Walters, Jas. L.	Tees.
Whiteside, F. H.	Lamerton.
Murdoch, J. L.	Lamerton.

Medicine Hat.

Borthwick, Wm.	Medicine Hat.
Hargrave, W. H.	Walsh.
Markwick, Geo.	Medicine Hat.
McLaughlin, J. D.	Medicine Hat.

Boyd, Robt.	Medicine Hat.
Little, Wm. J.	Medicine Hat.
Hargrave, J. G.	Walsh.
Hooper, Sidney	Manny Berries.
McClain, Fred	Medicine Hat.

Macleod.

Cochrane, Wm. F.	Macleod.
Gardner, C. W. E.	Macleod.
Maryfield, Fred T.	Macleod.

Nanton.

Narrish, J. D.	Nanton.

Olds.

Distman, C.	Olds.
Kembry, Raymond A.	Olds.
Moore, C. Wm.	Tolman.
Wood, Chas. T.	Red Lodge.
Wyndham, W. T.	Huxley.
Brewster, J. I.	Bowden.
Sackrider, S. F.	Bearberry.

Okotoks.

Bannister, A. E.	Davisburg.
Fraser, J. A. W.	Jumping Pond.
Mickle, Chas. W.	Spring Bank.
Woolley-Dodd, A. G.	Midnapore.

Ponoka.

Ravensburg, O. C.	Asker.
Tyner, Robt. E.	Ferrybank, Ponoka.

Pincher Creek.

Connolly, Alf. T.	Pincher Creek.
Eddy, W. T.	Cowley.
Godsal, F. W.	Cowley.
Porter, Geo.	Livingstone.
Smith, Harold J.	Pincher Creek.

Pakan.

Thompson, Lewis	Pakan.
Flaueand, F.	Brazeau.
Dubord, E.	Durlingville.
Amsden, Roy C.	Elk Point.
Vezeau, E.	Bonnyville.
Jesson, E.	Boyne Lake.

Red Deer.

Fiske, Robt. E.	Hillsdown.
Fisher, F. B.	Red Deer.
Gaetz, Fred	Red Deer.
Martin, Angus	Red Deer.
McKuchney	Red Deer.
Reinholdt, J. F.	Red Deer.
Wilson, Jno.	Evarts.
Fred, A. J.	Pitcox.
Hollender, T.	Evergreen.
Gerber, W.	Evergreen.
Kneeshaw, Percy	Gaetz Valley.

St. Albert.

Hughson, W. S.	Manawan.
Hall, Thos.	Manawan.
Verstracte, Camille	Villeneuve.

Stony Plain.

Knapp, H. H.	Winterburn.
Mills, Chas.	Inga.
McDonald, J. L.	Edmonton.
Steffler, Ed.	Spruce Grove Centre.

Stettler.

Dubois, J. F.	Hand Hills, via Stettler.
Ellwood, Jas.	Gopher Head.
Lensman, Gus	Mayvrille.
Lockwood, B.	Hand Hills, via Stettler.
Lund, N. A.	Hand Hills, via Stettler.
Peters, Wm. W.	Notre Dame de Savoy.
Patterson, Geo. W.	Red Willow.
Savage, J. G.	Delia.
Brace, Henry	Britain.
Flett, Lester	Hand Hills.
Miller, W.	Lawsonburg.
Gardner, E. M.	Gopher Head.
Daly, W. H.	Munson.
Usher, Chas.	Scollard.
Runn, J. B.	Garden Plains.

Sedgewick.

Brightland, E. W.	Talbot.
Eastmead, W.	Caseleyville.
Reed, W. E.	Caseleyville.
Seeman, L. H.	Vallejo.
Weffer, N. B.	Caseleyville.
Jones, H. M.	Ethelwyn.
Grant, John	Ethelwyn.
Beesley, Chas. W.	Proose.
Foss, M. F.	Stoppington.

Sturgeon.

Gibbons, W. R.	New Lunnon.

Strathcona.

Ellet, Chas. C.	Strathcona.
McAllister, Geo.	Strathcona.
Townsend, Ed.	Strathcona.

Vegreville.

Borwick, John	Whitford.
Richardson, Silas	Whitford.
Brunton, C. H.	Ryley.

Vermilion.

Talbot, W. C.	Irma.
Weir, A. M.	Mannville.
Campbell, A.	Innisfree.
Good, Wm.	Vermilion.
Bergey, L. D.	Naughton Glen.
Silverlock, A. F.	Peguis.

Victoria.

Bevington, Chas. E.	Fort Saskatchewan.
Belcher, Henry	Wostok.
Dzibenka, Jos.	Wostok.
Halkew, John	Wostok.
McGall, David	Star.
Simmons, W. L.	Fort Saskatchewan.
Nemirsky, Theo.	Wostok.
Simmons, Elsworth	Fort Saskatchewan.

Wetaskiwin.

Newton, Haydon	Wetaskiwin.

Lac Ste. Anne.

Musselman, D.	Onoway.
White, H.	Wabamun.
Bennett, Thomas	Padstow.

Rocky Mountains.

Bruneau, Jas. B.	Blairmore.
Brewster, Wm. H.	Banff.

Respectfully submitted,

BENJ. LAWTON,
Chief Game and Fire Guardian.

5.—*REPORT OF THE POULTRY SUPERINTENDENT.*

Sir,—I beg to submit herewith the annual report of the Poultry Branch of the department for the year 1912.

GENERAL.

During the year there has been an increased interest in poultry raising in general throughout the province. Through correspondence received and from observation I note that a great deal more attention is being given to poultry by many who formerly kept poultry without any particular object other than that the farm would not be complete without a few hens. Others again who have not felt inclined to be bothered with poultry around the place have secured stock or eggs and the general result is that poultry keeping is becoming more recognized each year as an adjunct necessary to the farm, not only for supplying the home, but from the financial returns secured from the ready sales of poultry products in the market.

That greater interest is being taken is also noted in the increased number of enquiries in the matter of housing and feeding, which indicates that more attention is being given to matters essential in poultry raising.

Aside from the general interest taken in smaller flocks a large number of persons have established larger plants on commercial lines making a specialty of poultry farming.

While there are still large numbers of scrub poultry kept on the farms there is a greater demand than in previous years for pure bred stock as evidenced by the reports of poultry breeders generally.

MARKETS.

The markets of 1912 have been equally as good as in former years with a much greater demand. There has been a marked increase in supply, but at the same time the demand has increased in a much greater ratio. While the province has always imported large quantities of poultry products the importation appears to be on the increase as well. Usually very few eggs are imported during the summer months until this year when several car loads were imported during the month of July, these importations coming largely from the United States.

The egg market during the year was more firm than in the previous year, no doubt due to the demand being much in excess of the supply. During the winter months fresh eggs sold readily at from 50 to 60c per dozen. While the supply was somewhat limited it was much greater than in any former year.

Summer eggs remained firm throughout the season, being quoted at from 20c to 22c per dozen, during the months of April, May and part of June. From the middle of June to September case eggs were quoted somewhat lower and graded No. 1 and No. 2. No. 1 being quoted at from 18 to 19c, while at the same time strictly fresh eggs in the local market were selling freely at 30c per dozen.

In order to ascertain the difference in price between case and fresh eggs I made it a point to visit the candling room of a local produce firm, and found the eggs arriving in a much inferior condition than earlier in the season. At the time of my visit I found that it required three cases of receipts to make one case of No. 1 eggs. The No. 1 grade thus made I found to be much inferior to the recognized No. 1 grade of eastern Canada. I noticed a large number of stale eggs and many in the first stages of incubation due to the warmer weather.

Had the producers followed the instructions recommended at all times by the poultry branch and produced only infertile eggs for market practically all the summer loss would be eliminated. By so doing not only would better prices be realized, but the dealers would have a much superior egg to offer to customers and consumers.

A marked improvement is also noted in the dressed poultry being offered. Many producers are paying more attention to fleshing their poultry, killing and plucking in a manner recommended to secure the better prices. There are still large quantities of poultry being offered that have been scalded and killed with a full crop, that not only reduces the market value, but in many cases makes the meat unfit for consumption. In a number of cases the local boards of health have confiscated and destroyed such being offered for sale. The attention that of late has been given to the pure food laws by our local health departments throughout the province is making conditions such that soon there will be no sale for poultry of this character.

There is still, however, an unlimited demand at good prices for all the market poultry of good quality that can be produced.

In their desire to get a greater quantity of the better quality of dressed poultry a number of the dealers have established fattening houses and crate feed much of the live poultry received.

While there is a much better quality and a much larger quantity offered the demand has been even greater, especially for the better class. The importation of dressed poultry continues, and will likely do so for many years to come from the fact that the consuming population is increasing more rapidly than the poultry and eggs are being produced.

The importation of poultry and eggs still continues from the eastern provinces, and during the past summer many carloads of eggs have been imported from the United States. With the larger portion of the emigration that is coming to the Dominion settling within the province the demand is increasing more quickly than the supply.

It will thus be seen that the market conditions in the province are such that even a much greater interest should be taken in poultry raising.

EDUCATIONAL WORK.

The educational work of the poultry branch for 1912 has been much greater and more extensive than in any former year. A large number of poultry institute meetings were held during the winter months throughout the province. Over 90 meetings in all being held. In this work the department was ably assisted by Miss Nora Trench, Alix; Mr. E. J. Cook, Lethbridge, and Mr. J. T. Worthington, Strathmore. At these meetings general information and instruction was given in poultry raising.

Short course schools were held at Claresholm, Gleichen, Stony Plain, and Olds. At each of these schools the following subjects were dealt with: Poultry house construction, ventilation and sanitary requirements in housing, winter egg production, feeding and caring for poultry generally, incubation and rearing, fattening and marketing. At each of the schools there appeared a marked interest in the class-work.

A new feature in educational work was undertaken during the month of November in connection with the tour of the province with the Mixed Farming Special. A baggage car on this train was fitted up and devoted to poultry exhibits. Included in these exhibits were live birds illustrating the crate system of feeding. Representative utility pens of Barred and White Rocks, Buff Orpingtons, White Wyandottes and Rhode Island Reds. An exhibit of a killing device, shaping frame, with dressed birds in shaping, two cases of dressed poultry, one case illustrating properly killed and packed. The other illustrated poorly fleshed and poorly packed. Different styles of trap nests were exhibited with trap nest records and results of trap nest work.

There were also models of different styles of poultry houses, and fronts for same, with general interior fixtures. Models of brooder houses of different styles, feed troughs, self feeding hopper, grit bones, cold brooder and other fixtures in connection with poultry keeping. The exhibits were viewed by a large number of people at each stopping place, and a lecture was given dealing with housing, feeding, and other matters of interest.

During the month of June I attended a meeting of the executive of the Poultry Producers' Association of Canada at Ottawa, and the fourth annual meeting of the association the following day.

The executive meeting was attended by representatives of the various provinces and many matters were discussed relative to poultry matters in general and particularly with the object of a general co-operation and uniformity of action in poultry matters throughout the Dominion.

At the conclusion of the meeting of the executive the following resolutions were adopted by the members in session at the annual meeting, and presented by the executive in a body to the Honourable Martin Burrell, Minister of Agriculture:

That while this association appreciates the stimulus given to the canned poultry trade by the operation of The Meat and Canada Foods Act, it would ask that the regulations governing the inspection of meats should be amended in order that only undrawn poultry may be allowed to enter establishments under inspection, or enter into export trade.

We, the members of the Poultry Producers' Association of Canada in convention assembled, respectfully request that an invitation be extended to the World's Poultry Congress to hold its next convention in Canada in 1914.

Several meetings of this congress have been held in the old land, and members have expressed a desire through their secretary that the next meeting be held abroad. Canada would like and needs this meeting.

We therefore suggest that immediate action be taken before the congress decides to meet elsewhere.

We, the members of the Poultry Producers' Association of Canada in annual session assembled, desire to call to your attention the following facts:

Whereas the poultry industry has assumed considerable proportions and is now the means of a large revenue to the farmers of Canada, and

Whereas though the production is gradually increasing we do not produce enough for home consumption as last year about four hundred carloads of eggs were imported from the United States alone, and

Whereas the marketing conditions in Canada are such that at least 15 per cent. of the value of eggs alone is lost to the industry largely because of the lack of education, and

Whereas the poultry industry does not obtain at the hands of the Dominion government what it is in all fairness entitled to, having received only about $1,500.00 out of a total of over $105,000.00 expended on the live stock industry in Canada last year.

We therefore respectfully submit for your consideration the following suggestions:

1. That the poultry department in connection with the experimental farm system be put on the same basis as the other departments of the farms, that is to say that there be a Dominion poultry husbandman whose duties shall be to oversee the experimental work in connection with the farm at Ottawa, and who in addition shall have supervision over the poultry work at the branch experimental farms. We would further suggest that each branch farm be equipped with a first class poultry department, and that a competent poultryman be appointed to each. Furthermore we wish to call your attention to the fact that the equipment be provided for investigation and experiment work.

2. That poultry disease investigations receive due consideration. The recent serious losses from blackhead in turkeys, tuberculosis in fowl, and diarrhoea in chicks have practically forced many people out of the business. We would, therefore, recommend that suitable men be employed and suitable equipment provided to conduct these investigations. The necessity for this will be readily understood when it is considered that there is no recognized authority in Canada on poultry diseases, the result being that any one wishing information writes to half a dozen sources and gets as many different answers and methods of treatment.

3. That as there is no farm product marketed in a worse condition than dressed poultry and eggs, and the loss to the poultry producer and consumer being enormous, we suggest that steps be taken to prevent the losses in the marketing of eggs and dressed poultry by a campaign of education and demonstration followed by standardization and adequate legislation.

4. That your department provide for the Poultry Producers' Association of Canada an annual appropriation similar to that which is given to the Seed Growers' Association. The Poultry Producers' Association of Canada has for some years been endeavouring to induce the producer to adopt better methods of handling and grading of poultry products and to encourage co-operation as a better means of marketing for both the producer and the consumer. This valuable work has been severely handicapped from lack of funds to pay a permanent secretary.

All of which is respectfully submitted.

Dr. Chas. H. Higgins, Dominion pathologist, addressed the convention on the subject of poultry diseases. He discussed with some detail tuberculosis in fowl, white diarrhoea in chicks, and blackhead in turkeys. He handed in a leaflet prepared by himself on tuberculosis in fowl. Copies of this leaflet which discusses the disease fully were distributed among the members. Regarding white diarrhoea, Dr. Higgins said that he was not altogether satisfied that it is not due to a physical abnormity rather than an organism. If the egg sac be not all absorbed at birth, or within seventy hours of birth, and the chick fed before this sac be absorbed, it follows that the digestive organs are blocked, and the white excrement which is voided is really a discharge from the kidneys, such as uriates, etc., in which no organisms have so far been discovered.

Questioned by Mr. Elford as to the use of muriatic acid for blackhead in turkeys, Dr. Higgins said that he had found it fairly effective though not infallible. He had used sulphate of iron, but this was less satisfactory. The organism causing the disease required an alkaline medium, and so if muriatic acid be kept before the fowl intermittently if not always the disease is likely to be checked by the fowl taking some of it into their digestive tracts and so having the alkaline medium neutralized.

An interesting address was also given by Dr. Barnes, chief inspector under The Meat and Canned Foods Act, who stated that thousands of cans of so-called poultry were formerly put on the market though it was known that very little poultry was canned. This business is now done away with, and there are to-day ten factories which can poultry exclusively. Last year they canned 378,447 pounds as compared with 15,578 pounds two years ago. But in regard to the examining of the fowl used in these canning factories there can be no proper system of inspection for the fowl are taken in already drawn. Prof. Graham pointed out that it was just such fowl as went into a canning factory that most required inspection.

Mr. J. H. Hare, district representative of the Ontario Department of Agriculture, spoke of the co-operative handling of poultry products in the country following the methods advanced by the P. P. A. For some two years past Mr. Hare and two assistants have been working along these lines. They began by taking as far as they were able a careful census of the farms as to the fowl kept and the state of these fowl. Mr. Hare said that the two greatest drawbacks he found in his district were the small flocks kept and the lateness of hatching the chicks. He found also that about 30 per cent. got no eggs at all during the winter, while about 7 per cent. had present in their flocks some serious disease, chiefly tuberculosis.

Mr. Hare's work came under two heads, viz., demonstration and organization. In connection with the former he had built on the farm of one of his patrons, an enthusiastic poultry woman, who hitherto had not been able to get winter eggs, a demonstration poultry house at a cost of $45.00. He selected thirty fowl, which he sold to his patron, who fed and kept them under his direction during the winter months. Her records showed that for the three winter months she had made a clear profit of 60 cents per hen. Later she sold a great many eggs from these hens to her neighbors for breeding purposes. The demonstration house was a source of much interest in the district, and many enquiries were made with reference to it, and the means adopted to secure eggs in winter. Mr. Hare found out that demonstration was preferable to lecturing.

In regard to the organization work, Mr. Hare recognized the futility of proper marketing in the present system of handling. Co-operative "circles" were therefore begun in districts where at least twenty farmers expressed willingness to join. But many difficulties were encountered. About 80 per cent. refused absolutely to have anything to do with the circles until the experience of others showed that better prices were the result. However, in time this backwardness was overcome by offering them the agency for the circle's eggs. In one district, however, a huckster raised his price to one cent per dozen over the circle's price but the members stood loyal to the circle, understanding doubtless that were the circle to be put out of business the same unsatisfactory state as obtained previous to its inception would return. Questioned as to whether without his attention, advice and work the circles would continue, Mr. Hare stated that he saw no reason why they should not continue after a reasonable period of guidance. Mr. Hare introduced the stamp system for eggs in his district, and at the end of his address handed round a sample giving the circle number and number of member.

During my visit in the east I found that the movement for more and better poultry has grown very fast during the past few years, and that throughout the eastern provinces the producers are paying much better attention than formerly to marketing a better quality of poultry and eggs. I found a very marked improvement in the eggs on the market. Special select eggs being marketed in one and two dozen cartons stamped with a guarantee as to quality.

STATISTICAL RETURNS.

During the month of June a number of forms were sent out to leading poultry raisers in various districts of the province with the object of securing reliable data as to the existing conditions regarding poultry matters. These forms were filled in by the persons receiving them to the best of their knowledge and judgment.

A summary of the returns is as follows:

Average number of hens kept on each farm	195
” percentage of fertile eggs	86%
” ” of chickens hatched	67.8%
” ” of eggs laid in winter months	29.8%
” price during winter months	49c
” price during summer months	30c
Highest price for season	60c
Lowest price for season	20.69c

A great deal of other information most valuable to the poultry branch was received, and the returns in general indicated that more and better poultry was being kept than in former years, and that the demand for breeding stock, and eggs for hatching, was much greater than the supply.

The returns indicated that eggs for hatching from good utility breeds sell at from $1.00 to $2.00 per setting, while popular price for eggs from exhibition pens is from $3.00 to $5.00 per setting.

The popular prices for utility breeding stock ranged from $1.50 to $2.50 per bird, while exhibition stock ranged from $3.00 to $10.00 per bird. Special instances however may be noted where from $50.00 to $100.00 have been paid for good specimens of exhibition birds.

POULTRY SHOWS AND EXHIBITIONS.

In the matter of exhibition poultry there has been a remarkable development. The rapid advancement that has been made in quality and numbers at the summer fairs and winter poultry shows can be rightly understood only by visiting these shows.

Three or four years ago very little attention was paid to poultry exhibits at the majority of summer fairs, while during the past year the poultry exhibit has been a prominent feature at many of the fairs. At Lethbridge, Calgary and Edmonton exhibitions the entries ranged from 800 to as high as 1500 or more birds. While at smaller fairs such as Medicine Hat, Granum, Leduc, Fort Saskatchewan, Vegreville and Vermilion entries ranged from 150 to as high as over 900 at Leduc. While until recently the entries were largely confined to fanciers and poultry keepers living in the towns and cities, the large number of farmers exhibiting and securing prizes is a good indication that the farmers throughout the province are not only interesting themselves in pure bred poultry, but are specializing in exhibition birds as well.

There has also been a marked improvement both in quality and number of birds shown at the winter poultry shows. Winter poultry shows were held at Medicine Hat, Lethbridge, Calgary, Edmonton, Stavely, Granum, Taber, Pincher Creek, Magrath and Macleod.

The younger shows having as large an entry and a better quality than our larger shows had five or six years ago. At our larger shows, i.e., Lethbridge, Calgary and Edmonton, the entries ranged from 1000 to 1700 birds, these shows being held in permanent poultry buildings. A new feature in winter poultry shows was demonstrated at Calgary during the month of November when a poultry and fat stock show was held in the horse show building. This show was a decided success, some 1700 entries in the poultry classes being exhibited. The horse show arena provided ample room to make a much more attractive display than it was possible to secure in the old poultry show building.

In connection with the show addresses were given in the matter of housing, feeding and caring for poultry in general, with demonstrations on killing and preparing poultry for market.

The combined poultry and fat stock show was pronounced by exhibitors generally a decided success and the prospects for the future are decidedly encouraging.

Some of our winter poultry shows have grown so rapidly that they have outgrown the original grant of $300.00 under The Agricultural Societies Ordinance.

With the objects of meeting the requirements of such associations and to further encourage the industry the provincial legislature recently amended the Ordinance so that associations paying out $500.00 or more in prize money receive a grant of 66 2-3% of the money actually paid out in prizes.

POULTRY PLANT.

During 1912 the demand on the poultry plant for breeding stock and eggs for hatching has been greater than in any previous year. A large number of eggs were sent out for hatching purposes, but owing to the small capacity of the plant we were unable to supply but a small proportion of the eggs required.

Those who sent us orders that we were unable to fill were referred to reliable breeders who might be in a position to supply the eggs required. In some cases, however, I found that the breeders had already booked orders for all the eggs they had to spare and many persons requiring eggs were unable to secure them at all.

The demand for breeding stock was equally as great, and while many applications were referred to the breeders of the province they were unable to secure the required stock, with the result that thousands of breeding stock are required in the province at the present time without a supply sufficient to meet the demand.

During the year very little progress was made with the poultry plant. First because it remained throughout the year without a competent manager, and again because the lease with the Hudson Bay Co. had expired and a delay was necessary to secure suitable grounds on which to move the plant and to reach a decision regarding a policy of the future of the plant.

Suitable grounds were finally secured on a portion of the University farm, and late in the fall the plant was transferred to its new location.

In the meantime a new and progressive policy was decided on by the Minister that is now being carried out by the Poultry Branch of the department.

At the new poultry plant a number of new houses have been built with the object of increasing the housing accommodation to one thousand bird capacity. The continuous house system has been dispensed with and the colony house system adopted. The intention being to confine the breeds separately on large runs giving the breeding stock more liberal range than formerly.

The additional stock for the new plant has been secured by an order of 1000 birds imported from Ontario. The stock ordered from the east being of exceptional good quality with special attention given to their egg producing qualities. The breeds purchased and kept at the plant will be the same as formerly, *i.e.,* Barred and White Rocks, Buff Orpingtons, White Wyandottes, Rhode Island Reds and White Leghorns.

A new feature of the policy of the poultry branch is the loaning of male birds to farmers to assist them in the improvement of their flocks.

Regulations governing the loaning of male birds are as follows:

I herewith make application for the free use of a male bird for my flock of poultry.
My present flock consists of...............females of................breed.
I desire to hatch about...................................during the season.
From my present flock I can select..............females that are superior to the others and more suitable for hatching a higher quality of poultry.

For the privilege of securing a male bird I agree to the following conditions:

(1) To kill or remove from the farm any or all male birds I may have, and neither keep or allow to be kept any male birds or bird other than the birds or bird supplied by the department.

(2) To accept the bird or birds sent me on or about March 1st and to return same in good condition, charges paid, not later than the 15th of May following.

(3) That when the young males reach the weight of from 4 to 4½ lbs. I will separate them from all females and fatten them for market.

NOTE: Birds put on flesh at this weight more readily than when older.

(4) That in case the bird or birds sent me die or meet with accident I agree to pay the department by May 15th the sum of $2.00 for each bird received.

(5) That I will give attention to the matter of housing and caring for my poultry, and follow as far as I reasonably can any instructions that may be sent me by the department.

(6) That I will for my own benefit keep a record of the returns from my flock, and furnish same to the department if required either monthly or annually on forms sent me by the department.

(7) That I will market only infertile eggs from June 1st to March 1st.

NOTE: Eggs are fertilized ten days after the male birds have been placed with the hens, and infertile ten days after the males have been removed.

(8) That my poultry plant be free to inspection by the department at any time, and that I will give attention to reasonable suggestions considered beneficial to my success.

Signed.................................
Express office.........................Post office........................

In consideration of the above conditions being fulfilled the Poultry Branch of the Department of Agriculture will render reasonable assistance in securing good markets for those who take a special interest in their poultry.

It is hoped that by the loaning of male birds for the breeding season only the farmers will see the advantage of producing only infertile eggs for market, and do much to overcome the poor condition in which a great many eggs are marketed as mentioned earlier in this report.

Arrangements have also been made for the shipping out of day old chicks for the season of 1913. A 2400 egg Candee Mammoth incubator was ordered especially for this work. It is hoped that a great deal better service will be rendered to the people of the province in this way, and much of the loss and breakage due to the rough handling of eggs by express companies will be overcome, as the chicks will ship more readily than the eggs.

Often too eggs that have been roughly handled fail to give good hatching results, and under this system the department takes the responsibility for the hatching and sends out the chicks at $2.50 per dozen, $4.00 per 25, and $7.50 per 50, which should prove cheaper and more satisfactory than in the sending out of eggs. The eggs, however, will still be sent out to persons desiring same.

These with other matters that are being formulated for the year 1913 will I believe be much more effective in developing the objects the plant is intended to serve and will be much more satisfactory than in any previous year.

For some time past the work of the poultry plant has been somewhat handicapped through the lack of a suitable person as manager. This difficulty has now been overcome by the appointment of Mr. Joseph Shackleton, Olds, as manager of the new plant. Mr. Shackleton has for a number of years been a successful breeder of poultry in the province and is well and favourably known to poultry fraternity generally and will, I believe, make a success of the new plant and its work.

I am, Sir,
Your obedient servant,

A. W. FOLEY,
Poultry Superintendent.

6.—*REPORT OF RECORDER OF BRANDS.*

SIR,—I have the honour to submit the following report on the work of this branch of your department for the year 1912.

During this period 1545 horse, and 1542 cattle brands were allotted and recorded, and 374 transfers and 16 changes were recorded, while the extracts numbered 22, and searches and estrays 1633, being a total of 5132 transactions.

Compared with the previous year these figures show an increase of 7 horse and 262 cattle brands, 12 transfers and 247 searches and estrays, while the changes asked for have decreased by 16, showing a net increase of 512 in the number of transactions. An average of the previous five years shows 1374 horse and 1346 cattle brands allotted and recorded, and as will be seen from the foregoing, horse brands give an increase of 171, and cattle brands 196, above these figures.

The number of letters received during the year was 5519, while the number of documents despatched was 8998, a total of 14,517, being an increase of 651.

One feature of the above statement stands out boldly, and that is, the increased number of persons applying for cattle brands—some 262 more than the previous year. There can be no doubt that the propaganda now being carried out by the department of agriculture for the province, and the stand taken by the lands department of the Canadian Pacific Railway to encourage the farmers of the province to take up mixed farming is bearing good fruit, and with the enhanced price of beef farmers are now utilizing most of the feed they only a few years ago used to burn. Whether the report of the Grazing Commission to grant closed leases and to lay aside the wild and rough lands in various parts of the province for purely grazing purposes, be acted upon or not, remains to be seen. The move suggested, however, would undoubtedly give an immediate impetus and a permanency to the business of cattle raising, but whether it will be mixed farming alone or grazing under closed leases, there can be no doubt that for the future the cattle business will have much greater care bestowed upon it than in the past, and care will be taken to see that during the winter months at least all cattle will be under fence and properly fed.

For the past year I find the large proportion of the brands issued for horses and cattle, have been to parties living near the main line of the Canadian Pacific Railway and Crow's Nest Railway and north of Medicine Hat, but it is also noticeable that brand applications from settlers living near the districts recently opened up by the Grand Trunk Pacific and the Canadian Northern as well as the other branches east of the Calgary and Edmonton line are becoming more numerous, while quite a number have been received from the Peace River and Grand Prairie country.

As to the amended Stray Animals Ordinance of 1908, this is being still better understood. The number of cases reported to this office go on increasing. During the past year 1655 cases were reported, being an increase of 247 over 1911. Each finder is written to acknowledging his report and if the animal bears a recorded brand the name and address of the owner is given to him, while every owner is given a full description of the animal, and as near as possible the exact location of where the animal is being held.

Instructions have been received from the department to issue a supplement to the brand book for the years 1907, 1908, 1909, 1910, 1911 and 1912, and this work is being prepared at present and will be published as soon as completed, but as the book will contain over 19,000 entries, it will naturally take some considerable time.

The following is a statement showing the transactions from 1898 up to 31st December 1912:

TRANSFERS.

1899		132
1900		165
1901		222
1902		265
1903		400
1904		402
1905	(N. W. Territories)	299
	(Alberta)	120
1906		389
1907		430
1908		421
1909		430
1910		524
1911		362
1912		374

CHANGES.

1899		..
1900		27
1901		20
1902		26
1903		43
1904		43
1905	(N. W. Territories)	32
	(Alberta)	7
1906		38
1907		28
1908		29
1909		33
1910		34
1911		32
1912		16

SEARCHES AND EXTRACTS.

1899		..
1900		35
1901		42
1902		100
1903		144
1904		124
1905	(N. W. Territories)	81
	(Alberta)	13
1906		73
1907		73
1908	(Including strays)	292
1909		783
1910		1218
1911		1408
1912		1655

Number of brands re-allotted in 1898 3228

CATTLE BRANDS.

1898	2111
1899	1466
1900	1508
1901	1689
1902	1934
1903	2390
1904	2034
1905 (N. W. Territories)	1353
(Alberta)	337
1906	1894
1907	1230
1908	1225
1909	1326
1910	1672
1911	1280
1912	1542

HORSE BRANDS.

1898	941
1899	821
1900	886
1901	947
1902	1234
1903	1390
1904	1346
1905 (N. W. Territories)	985
(Alberta)	248
1906	1361
1907	1030
1908	1103
1909	1308
1910	1891
1911	1538
1912	1545

TOTAL TRANSACTIONS.

1898	6280
1899	2419
1900	2621
1901	2920
1902	3559
1903	4367
1904	3949
1905 (N. W. Territories)	2750
(Alberta	725
1906	3756
1907	2791
1908	3070
1909	3880
1910	5339
1911	4620
1912	5132

Respectfully submitted,

JAMES WILSON,
Recorder of Brands.

7.—*REPORT OF THE SUPERINTENDENT OF FAIRS AND INSTITUTES.*

SIR,—I beg to present herewith the annual report of the Superintendent of Fairs and Institutes for the year 1912.

EDUCATIONAL WORK.

During the year institute meetings were held at 135 points throughout the province. Arrangements were made to hold as many as possible of these meetings at points some distance from railroads where nothing of this nature had been held previously. A new plan was also adopted in regard to advertising. In past years it has been the practice to forward advertising matter to some local man, with a request that he make arrangements for the meeting and look after the advertising. In many cases this advertising matter did not reach the persons who were sufficiently interested to attend to it properly and the result was that when the speaker arrived there had been no arrangement made for a hall and consequently no attendance.

During the month of December 1911, an advance agent was sent out to visit each point at which an institute meeting was to be held and carried with him advertising matter which he left with an interested person who would see that the advertising was properly done. Arrangements were also made for halls by the advance agent.

This plan proved a much greater success as a means of advertising. The attendance was greatly increased at practically all points and the arrangements made by the advance agent were carried through without a hitch.

Fourteen speakers were employed, two addressing each meeting. These were all men of wide practical experience who were especially competent to discuss their respective subjects. Practically every speaker reported a marked interest in the meetings throughout and in most places the farmers in attendance took part in the discussions following the address of the speaker.

Much valuable information which will be of use to the department was collected during these discussions.

INSTITUTE MEETINGS.

The following is a list of meetings addressed by D. W. Warner, Esq., on hog raising or dairying, and Miss Trench on poultry raising:

Bowden	January	9
Red Lodge	"	10
Dame Hall	"	11
Eagle Valley School	"	12
Berridale School	"	13
Olds	"	22
Betchton School	"	23
Mayton	"	24
Curlew	"	25
Trochu	"	26
Three Hills	"	27
Swalwell	"	29
Munson	"	30

Sunny Slope	February	1
Didsbury	"	2
Carstairs	"	3
Crossfield	"	5
Airdrie	"	6
Midnapore	"	7
Priddis	"	8
DeWinton	"	9
Okotoks	"	10
High River	"	12
Cayley	"	13
Nanton	"	14
Parkland	"	15
Stavely	"	16
Claresholm	"	17

The following list of meetings were addressed by W. J. Shuttleworth Esq., Delourne, Alta., on breeding and care of dairy cattle, and J. T. Worthington Esq., Strathmore, Alta., on poultry raising:

Entwistle	January	10
Rexboro	"	11
Wabamun	"	12
Stony Plain	"	13
Spruce Grove	"	15
Namao	"	16
Bon Accord	"	17
Legal	"	18
Morinville	"	19
Riviere Qui Barre	"	20
Dunstable	"	22
Paddle River	"	23
St. Albert	"	25
Tofield	"	26
Ryley	"	27
Holden	"	29
Viking	"	30
Irma	"	31
Wainwright	February	1
Edgerton	"	2
Chauvin	"	3
Ellerslie	"	5
Leduc	"	6
Wilton Park	"	7
Millet	"	8
Wetaskiwin	"	9
Blackfalds	"	10
Red Deer	"	12
Innisfail	"	13
Milnerton	"	14

Guy W. Johnson Esq., Provost, addressed the following meetings on soil culture and crops, and G. H. Hutton Esq., Lacombe, on breeding and care of dairy cattle:

Clive	January	15
Alix	"	16
Bullocksville	"	17
Cumberland School	"	18
Red Wing School	"	19
Castor	"	23
Stettler	"	24
Red Willow	"	25

Messrs. D. N. McIntyre and E. J. Cook addressed the following meetings on breeding and care of dairy cattle and poultry raising, respectively:

Fort Saskatchewan	January	9
Lamont	”	10
Chipman	”	11
Mundare	”	12
Vegreville	”	13
Brosseau	”	14
St. Paul de Metis	”	17
Elk Point	”	18
Clarkville	”	19
Lac St. Vincent	”	20
Innisfree	”	24
Chailey	”	25
Manville	”	26
Vermilion	”	27
Kitscoty	”	29
Lee Park	”	30
Tring	”	31
McDonaldsville	February	1
Lloydminster	”	2
Ponoka	”	5
Bismark	”	6
Rimbey	”	7
Bentley	”	8
Lacombe	”	9

The following meetings were addressed by P. S. Iddington Esq., Okotoks, Alta., on breeding and care of dairy cattle, and A. W. Foley Esq., poultry superintendent for the province, on poultry raising:

Provost	January	8
Hughenden	”	9
Hardisty	”	10
Bellshill	”	11
Flagstaff	”	12
Grainland	”	13
Sedgewick	”	15
Killam	”	16
Daysland	”	17
Bawlf	”	18
Camrose	”	19
Edberg	”	20

George Fraser Esq., Edmonton, lectured on breeding and care of dairy cattle, and W. H. Fairfield Esq., superintendent of the Dominion Experimental Farm, Lethbridge, lectured on alfalfa, at the following list of meetings:

Strathmore	February	6
Gleichen	”	7
Bassano	”	8
Medicine Hat	”	13
Irvine	”	14
Josephsburg	”	15

The following list of meetings were addressed by George Hutton Esq., Lacombe, and A. Mitchell Esq., Coaldale, on breeding and care of dairy cattle, and noxious weeds and forestry, respectively:

Granum	January	9
Macleod	”	10
Cowley	”	11
Pincher Creek	”	12
Monarch	”	13

Barons	January 15
Carmangay	" 16
Bowville	" 17
Champion	" 18
Reid Hill	" 19
Vulcan	" 20
Taber	February 1
Stirling	" 2
Raymond	" 3
Magrath	" 5
Cardston	" 6
Mountain View	" 7
Kimball	" 8
Warner	" 10
Altorado	" 13
Cochrane	January 23
Langdon	" 24
Acme	" 25
Irricana	" 26
Seven Persons	" 29
Bow Island	" 30
Grassy Lake	" 31

SHORT COURSE WORK.

Short Course Schools were held as follows:

Claresholm	January 15 to January 20.
Gleichen	January 22 to January 27.
Stony Plain	January 29 to February 3.
Olds	February 5 to February 10.

Short Course Schools held this year were limited to one week instead of two weeks as was the custom in previous years. This was found to be more effective as a high point of interest was maintained throughout the course. Experience had proven that two weeks was just a trifle too long as the interest usually began to lag during the latter part of the last week.

The programme of addresses at these schools was very similar to that given in previous years.

The following subjects were discussed:

Live Stock.

Instruction was given in breed types, feeding, breeding, care and management of live stock.

Grain-Soil and Weeds.

The growing, judging and grading of grains, soil cultivation, noxious weeds, grasses and fodder crops. Samples of grains and weeds were used for demonstration.

Poultry.

The housing, feeding, hatching and rearing. Incubators and brooders were in operation. Birds were fattened, killed, dressed and packed for market.

Dairying.

Instruction in dairying covered the subject from the production of milk to the marketing of the finished product with farm dairy machinery in operation.

Domestic Science.

This branch of the work was conducted by Miss MacAdams and Miss Perkins, graduates of Macdonald Institute, Guelph, Ont.

Practical demonstrations were given in the preparation and cooking of soups, meats, tough and tender cuts, vegetables, desserts, bread, cakes, pastry and the general cookery of the average household. There was a discussion of household sanitation and the prevention of disease.

At each course there were judging competitions held and prizes offered for proficiency.

GRAND CHAMPIONSHIP COMPETITION.

A Grand Challenge Trophy was offered by the department of agriculture, open for competition to teams from the four schools. The four men standing highest at the local competitions formed the teams to compete for this trophy.

TEAMS.

GLEICHEN.

G. Westover	De Winton.
W. H. McEwen	Carlstadt.
J. Ostrander	Gleichen.
F. W. Jones	Gleichen.

OLDS.

A. M. McGorman	Innisfail.
W. T. McClure	Innisfail.
James Richards	Red Deer.
W. S. McKinnon	Olds.

CLARESHOLM.

G. E. A. Malchow.
L. A. Perry.
J. Gaudin.

STONY PLAIN.

E. B. Shields	Wabamun.
E. Priestly	Onoway.
J. Tweedale	Stony Plain.
W. Williams	Inga.

The department is very grateful to the following breeders of live stock who so kindly loaned their stock for use at the schools:

STOCK.	OWNER.	ADDRESS.
3 Percheron stallions	J. C. Drury	Cowley.
2 Clydesdales	John Richards	Red Deer.
3 Clydesdale mares	John Jamieson	Halkirk.
3 Percheron mares	J. C. Drury	Cowley.
1 Percheron mare	J. C. Lyle	Strome.
2 Shorthorn bulls	Bryce Wright	De Winton.
3 Shorthorn cows	Bryce Wright	De Winton.
2 Ayreshire bulls	Roland Ness	De Winton.
3 Ayreshire cows	Roland Ness	De Winton.
3 Holstein cows	Thomas Laycock	Calgary.

The following is a list of speakers who composed the staff of the Short Course Schools:

Miss Roberta McAdams, Macdonald College, Guelph, Ont.
Hon. Duncan Marshall, Minister of Agriculture.
George Harcourt, B.S.A., Deputy Minister of Agriculture.
Prof. Carlyle, Moscow University, Idaho.
C. E. Lewis, B.A., B.S.A., Supt. Fairs and Institutes, Edmonton.
A. McKenney, B.S.A., Supt. Seed and Weed Branch, Edmonton.
W. F. Stevens, Live Stock Commissioner, Edmonton.
A. W. Foley, Poultry Superintendent, Edmonton.
Roland Ness, De Winton, Alta.
Bryce Wright, De Winton, Alta.
H. B. Smith, B.S.A., Calgary.
C. P. Marker, Dairy Commissioner, Calgary.
H. S. Pearson, Dairy Instructor, Red Deer.
G. W. Scott, Dairy Instructor, Innisfail.

The programme at these schools was very similar to that given in previous years, with the exception, that a short course in domestic science was put on, as an adjunct to the short courses in agriculture, and the interest and enthusiasm with which this was received seemed to indicate that the time was ripe for a permanent provision to assist women's work on the farms and in the homes.

With this in view it is now proposed to organize a system of women's clubs or institutes under departmental supervision having as its object the consideration and simplifying of all problems pertaining to the home, and consequent achievement of better home conditions and the increase of the general fund of comfort, health and efficiency. The study of home economics, including as it does, household architecture, sanitation and hygiene, scientific nutrition, the care and training of children, and the knowledge of values relative and absolute, of household materials, will come in for a large share of attention. Mutual helpfulness will be urged, and social intercourse, which effects the development of an important side of human nature will be encouraged. In brief, a conscious effort will be made to promote the highest ideals of home, and the best standards of community life.

As the institutes are to be strictly non-sectarian and non-partizan, and as their object is one which must immediately enlist the sympathies of every thinking woman(they will have a very broad scope. Everyone who becomes a member may look forward not only to being assisted, but also to the privilege of contributing something for the help of others.

THE MIXED FARMING SPECIAL TRAIN.

The Mixed Farming Demonstration train which was conducted by the department of agriculture, through the province of Alberta, visiting sixty points in the province, contained three cars of pure bred live stock, including Percheron horses, Clydesdale horses, Shorthorn cattle, Ayreshires, Holsteins, and Oxford Down sheep.

Two baggage cars were fitted up with poultry equipment including different breeds of live poultry, also dressed poultry and models of poultry houses.

The grain car contained samples of the different varieties of wheat grown in Alberta; sheaves of wheat and mounted specimens of the various noxious weeds found in the province. Models of hog houses were carried, varying in price from $10 to $500.

The dairy car contained equipment for making butter and the subject was covered from production of milk to the marketing of the finished product.

Ten instructors were with the train and discussed farming in all its phases. Two stops were made each day.

The farmers showed a great interest in the work and I do not think we have carried on any extension work in the province that has taken better with the farmers and that did the same amount of good to advance the interests of agriculture.

The attendance was good considering the fact that the train was run when the farmers were busy harvesting.

ATTENDANCE AT DIFFERENT POINTS VISITED BY MIXED FARMING SPECIAL TRAIN.

Cochrane	150
Langdon	100
Bassano	85
Brooks	90
Carlstadt	150
Irvine	125
Walsh	125
Bow Island	150
Taber	125
Stirling	100
Raymond	150
Magrath	225
Cardston	200
Carmangay	225
Vulcan	225
Okotoks	100
High River	150
Cowley	100
Pincher Creek	175
Stavely	125
Nanton	150
Crossfield	50
Didsbury	100
Red Deer	100
Bowden	120
Coronation	200
Castor	150
Stettler	125
Alix	75
Kitscoty	100
Ponoka	300
Wetaskiwin	250
Hardisty	150
Provost	175
Killam	175
Daysland	125
Leduc	100
Camrose	350
Swalwell	75
Three Hills	100
Trochu	125
Huxley	75
Tofield	100
Holden	200
Viking	125
Irma	150
Wainwright	75
Edgerton	150
St. Albert	75

Morinville	175
Fort Saskatchewan	75
Vegreville	175
Munson	250
Big Valley	75
Red Willow	150
Donaldo	150
Innisfree	125
Manville	150
Lloydminster	150
Lamont	125
Total	8520

EXCURSIONS TO EXPERIMENTAL FARMS.

An excursion was run by this department to the experimental farm, Lethbridge, on July 23rd, stopping at all points between Medicine Hat and Lethbridge.

Excursions were also run from Strathcona to Lacombe, and from Calgary to Lacombe on July 29th, stopping at all intervening points.

The arrangements and advertising for these excursions were in charge of this department, and the number who visited the experimental farm was much greater this year than any previous year.

The superintendents of the experimental farms expressed themselves as well pleased with the attendance and the interest manifested by the visitors in the various lines of work being taken up on these farms.

The following is a list of the fairs held during 1912, together with the dates, names and addresses of the judges:

FAIR	DATE	JUDGE FOR HORSES	JUDGE FOR CATTLE, SHEEP AND SWINE
Crossfield	June 25	W. J. Stark, Edmonton	W. H. Hammer, Olds.
Innisfail	July 16–17	Bryce Wright, DeWinton	James Hunter, Innisfree
Calgary	June 28 to July 5		
Okotoks	July 17–18		
Edmonton	Aug. 12–17	John Bright, Ottawa, Ont. (Clydesdales). J. C. Drennan, North Battleford. (Percherons, Belgians and Suffolk Punch).	John Guardhouse, Highfield, Ontario. (Beef Cattle). G. H. Hutton, Lacombe. (Dairy Cattle and Swine).
Ft. Saskatchewan	Sept. 11	T. Rawlinson, Wimborne, Alta	W. H. Hammer, Olds, Alta.
Vegreville	Sept. 13	" "	" "
Innisfree	Sept. 17	" "	" "
Vermilion	Sept. 19	" "	" "
Manville	Sept. 20	" "	" "
Kitscoty	Sept. 24	" "	" "
Lloydminster	Sept. 26	" "	" "
Bowden	Oct. 1	" "	" "
Chauvin	Oct. 4	" "	" "
Cochrane	Sept. 10	Neil Smith, Brampton, Ont	A. W. McIntyre, Newington, Ontario.
Edgerton	Sept. 13	" "	" "
Wainwright	Sept. 17	" "	" "
Irma	Sept. 19	" "	" "
Viking	Sept. 24	" "	" "
Holden	Sept. 26	" "	" "
Tofield	Sept. 27	" "	" "
Swalwell	Oct. 1	" "	" "
Didsbury	Oct. 2–3	" "	" "
Trochu	Oct. 7	" "	" "
Three Hills	Sept. 17–18	C. H. Young, Glencoe, Ont.	James Hunter, Innisfree
Alix	Sept. 20	" "	" "
Milnerton	Sept. 24	" "	" "
Castor	Sept. 24–25	" "	" "
Stettler	Sept. 26–27	" "	" "
Camrose	Oct. 1–2	" "	" "
Provost	Oct. 3	" "	" "
Ponoka	Oct. 3–4	" "	" "
Wabamun	Sept. 10	A. J. Murphy, Cochrane, Alta.	T. H. Tinney, Medicine Hat.
Entwistle	Sept. 12	" "	" "
Rexboro	Sept. 18	" "	" "
Morinville	Sept. 20	" "	" "
Stony Plain	Sept 21	" "	" "
Wetaskiwin	Sept. 26–27	" "	" "

FAIR	DATE	JUDGE FOR HORSES	JUDGE FOR CATTLE, SHEEP AND SWINE
Warner	Sept. 10–11	W. J. Stark, Edmonton, Alta.	W. S. Jacobs, Munson, Alta.
Raymond	Sept. 12–14	" "	" "
Magrath	Sept. 17–18	" "	" "
Cardston	Sept. 20–21	" "	" "
Carmangay	Sept. 24–25	" "	" "
Taber	Sept. 26–27	" "	" "
Nanton	Sept. 30 to Oct. 1	" "	" "
Pincher Creek	Oct. 3	" "	" "
Priddis & Millarville	Oct. 4	" "	" "
Acme	Oct. 7–8	" "	" "
Red Deer	Aug. 21–23	Bryce Wright, DeWinton, Alta.	H. B. Smith, Calgary, Alta.
Killam	Sept. 6	" "	" "
Olds	Sept. 11–12	" "	" "
Leduc	Sept. 17	" "	" "
Lacombe	Sept. 18–19	" "	" "
Daysland	Sept. 24	" "	" "
Hardisty	Sept. 25–26	" "	" "
Macleod	Aug. 1–2	W. R. Lowes, Edmonton, Alta.	H. B. Smith, Calgary, Alta.
Claresholm	Aug. 8–9	" "	" "
Medicine Hat	Aug. 26–29	" "	" "
Gleichen	Aug. 30–31	" "	" "
Granum	Aug. 6–7	Dr. McKercher, Olds, Alta.	H. B. Smith, Calgary, Alta.
Staveley	Aug. 13	" "	" "
Gadsby	Oct. 1	" "	" "
Elk Point	Sept. 25	H. W. Scott, Vermilion, Alta.	H. W. Scott, Vermilion, Alta.
Lesser Slave Lake	Oct. 25		
North Alberta	Sept. 14		
Peace River	Sept. 26		
Lousana	Oct. 4	H. Taylor, Castor, Alberta	H. Taylor, Castor, Alberta.
Mid. Pembina	Sept. 6	D. Tinney, Castor, Alberta	D. Tinney, Castor, Alberta.
Grand Prairie	Sept. 26–27	" "	" "

FAIRS.

There is a marked increase throughout the province in agricultural fairs. Many new societies are being organized and a considerable number of the older societies are improving their grounds and buildings and the number and quality of exhibits is rapidly improving. Many of the societies are paying greater attention to the educational features of the fairs. Judging rings where those in attendance can watch the work of the judge have been established in a large number of fair grounds during the past year.

Judging competitions, prizes for collections of plants and insects are also forming a very important educational feature of the more progressive exhibitions. In fact the local fair is becoming a very important factor in agricultural education throughout the province.

During the past year seventeen new agricultural societies have been organized as follows:

SOCIETY.	ADDRESS.
Legal Agricultural Society	Legal.
Chauvin Agricultural Society	Chauvin.
Saskatoon Lake and Beaver Lodge	Beaver Lodge.
Onoway Agricultural Society	Onoway.
Nakamun and District	Nakamun.
Bassano Agricultural Society	Bassano.
Lousana Agricultural Society	Lousana.
Coronation Agricultural Society	Coronation.
Peace River Agricultural Society	Shaftesbury.
Carbon Agricultural Society	Carbon.
Gopher Head Agricultural Society	Gopher Head.
Winnifred Agricultural Society	Winnifred.
Gadsby Agricultural Society	Gadsby.
Edson Agricultural Society	Edson
Spirit River Agricultural Society	Spirit River.
Chinook Agricultural Society	Chinook.
Cereal Agricultural Society	Cereal.

LIST OF AGRICULTURAL SOCIETIES AND SECRETARIES FOR 1913.

Revised January 23, 1913.

SOCIETY	SECRETARY	ADDRESS
Airdrie	J. M. Windsor	**Airdrie.**
Alix	G. H. Darlow	**Alix.**
Acme	W. Bannerman	**Acme.**
Bowden	H. E. Shenfield	**Bowden.**
Bassano	I. P. Sharp	**Bassano.**
Cardston	J. Y. Card	**Cardston.**
Claresholm	J. R. Watt	**Claresholm.**
Chauvin	L. L. Pound	**Ribstone.**
Coronation	A. O. Thomas	**Coronation.**
Carbon	T. A. Walker	**Carbon.**
Camrose	Wm. Downs	**Camrose.**
Crossfield	E. S. McRory	**Crossfield.**
Cochrane	A. E. Stickland	**Cochrane.**
Castor	L. B. Browne	**Castor.**
Carmangay	A. F. Wilson	**Carmangay.**
Cereal	John A. Sully	**Cereal.**
Chinook	Lorne Proudfoot	**Chinook.**
Didsbury	H. B. Atkins	**Didsbury.**
Daysland	A. A. P. McDowell	**Daysland.**
Deserett (Magrath)	Benj. Matkin	**Magrath.**
Entwistle	J. D. Read	**Entwistle.**
Elk Point	C. M. Mangusson	**Elk Point.**
Edgerton	Jas. Milne	**Edgerton.**
Edson	F. W. Laycock	**Edson.**
Fort Saskatchewan	G. T. Montgomery	**Ft. Saskatchewan**
Gleichen	J. T. Johnston	**Gleichen.**
Granum	Jas. Blair	**Granum.**
Grande Prairie	David Axon	**Grande Prairie.**
Gopher Head	R. E. Baldridge	**Gopher Head.**
Gadsby	C. P. Garvey	**Gadsby.**
High River	Harry Nelson	**High River.**
Holden	John Ballard	**Holden.**
Hardisty	Alex Mursell	**Hardisty.**
Innisfail	Stuart Moore	**Innisfail.**
Irvine	L. R. Harris	**Irvine.**
Innisfree	Wm. J. Reid	**Innisfree.**
Irma	E. T. McDowell	**Irma.**
Kitscotty	G. W. Parsons	**Kitscotty.**
Lacombe	Jas. Gourlay	**Lacombe.**
Lethbridge	J. W. McNicol	**Lethbridge.**
Leduc	C. W. Carroll	**Leduc.**
Lloydminster	H. Huxley	**Lloydminster.**
Langdon	Omar Botsford	**Langdon.**
Lesser Slave Lake	George E. Martin	**High Prairie.**
Legal	Armond Pilon	**Legal.**
Lousana	H. S. Murray	**Lousana.**
Macleod	Robert E. Mercer	**Macleod.**
Medicine Hat	H. Hassard	**Medicine Hat.**
Manville	G. B. Macdonald	**Manville.**
Mid-Pembina	Charles Welch	**Heaton Moor.**
Munson	W. S. Jacobs	**Munson.**
Nanton	Wm. Robertson	**Nanton.**
Milnerton	E. W. Meers	**Wimborne.**
Nakamun	P. T. Horner	**Nakamun.**
Olds	R. B. Campbell	**Olds.**
Okotoks	E. A. Hayes	**Okotoks.**
Onoway	Wm. C. Turnbull	**Onoway**
Pincher Creek	J. W. Harwood	**Pincher Creek.**
Ponoka	T. W. Hutchinson	**Ponoka.**
Priddis and Millarville	Richard Knights	**Calgary.**

SOCIETY	SECRETARY	ADDRESS
Provost	G. L. Hamilton	Provost.
Paddle River	A. C. Slaughter	Paddle River.
Peace River	J. E. Carson	Shaftesbury.
North Alta. Agri. Soc.	J. M. Milne	Kinnoull.
Raymond	F. T. Holt	Raymond.
Rexboro and District	A. G. Bennett	Rexboro.
Red Deer	E. W. Bjorkeland	Red Deer.
St. Albert	J. I. Tellier	Morinville.
Stavely	R. A. Hopkins	Stavely.
Strome-Killam	Chas. F. Lyall	Strome.
Stony Plain	T. P. Lindley	Stony Plain.
Swalwell	A. B. Claypool	Swalwell.
Strathmore	Frank T. McElhees	Strathmore.
Saskatoon Lake & Beaver Lodge.	J. L. Riches	Beaver Lodge.
Spirit River	John P. Proudfoot	Spirit River.
Stettler	Harry F. Mullett	Stettler.
Sedgewick	M. Harper	Sedgewick.
Taber	T. A. Sundal	Taber.
Three Hills	John L. Huxley	Three Hills.
Tofield	R. N. Whillans	Tofield.
Trochu	D. H. Brinsley	Trochu.
Vegreville	Frank Wilson	Vegreville.
Vermilion	Job Mace	Vermilion.
Viking & Birch Lake	Jac. C. Barker	Viking.
Wetaskiwin	Chas. D. Enman	Wetaskiwin.
Wabamun	E. B. Shields	Wabamun.
Warner	D. I. Gue	Warner.
Wainwright	S. R. Bowerman	Wainwright.
Winnifred	H. Flett	Winnifred.

EXHIBITION ASSOCIATIONS.

Inter-Western Pacific Exhibition Co. (Alberta Provincial.)
Edmonton Industrial Exhibition Association.

FINANCIAL STATEMENT OF AGRICULTURAL SOCIETIES

	SOCIETY	Government Grant, Paid 1912	Total Receipts	Total Expenditure	Balance on Hand	Assets	Liabilities
1	Cardston	$ 1,006.00	$ 22,221.06	$ 22,221.06	$..........	$ 4,279.85	$ 4,279.85
2	Magrath	1,295.17	5,015.38	4,887.10	128.28	5,000.00	4,100.00
3	Didsbury	688.20	1,123.80	1,091.26	32.54	....	....
4	Innisfail	1,373.10	7,814.17	7,798.68	15.49	6,825.40	3,135.29
5	Lacombe	1,260.67	5,374.11	5,374.11	....	12,210.19	4,102.60
7	Macleod	1,344.34	28,384.01	28,384.01	....	2,717.96	4,262.00
8	Medicine Hat	1,813.53	67,832.11	67,832.11	....	42,072.11	41,976.32
9	Olds	739.67	1,681.28	1,681.28	....	4,400.00	2,031.29
10	Pincher Creek	731.00	1,930.25	1,920.74	9.51	6,270.50	2,805.45
11	Ponoka	1,239.10	4,168.18	4,157.90	10.28	970.00	15.50
12	Raymond	1,256.83	5,574.94	5,488.50	86.44	2,890.54	3,400.00
14	Okotoks	791.17	1,923.45	1,922.31	1.64	1,781.64	777.65
15	Vegreville	935.73	3,536.05	3,536.05	....	4,046.50	3,145.39
16	Wetaskiwin	1,206.80	3,943.21	3,943.21	....	3,014.14	2,003.66
17	Leduc	1,401.73	5,211.73	5,211.73	....	1,855.27	2,110.00
18	Nanton	463.00	1,197.89	1,055.30	142.59	149.09	6.50
19	Vermilion	496.77	2,392.20	2,392.20	....	1,216.73	524.25
20	High River	1,015.00	3,155.12	3,155.12	....	1,325.00	1,351.62
21	Priddis and Millarville	590.66	987.40	987.40	....	....	....
22	Viking and Birch Lake	508.20	1,906.50	1,906.50	....	949.33	640.70
23	St. Albert	353.17	1,218.25	1,218.25	....	310.00	429.84
24	Manville	....	1,009.95	1,000.25	9.70	56.00	651.25
25	Stettler	360.33	2,060.39	2,060.39	....	5,500.00	1,355.81
26	Daysland	639.33	1,154.69	1,129.21	25.48	1,529.68	1,690.00
27	Claresholm	914.00	3,844.04	3,844.04	....	....	1,127.44
28	Milnerton	808.86	2,537.55	2,500.41	37.14	1,421.00	1,050.00
30	Taber	465.17	2,999.50	2,998.85	2.65	1,453.41	960.00
31	Innisfree	412.90	1,450.51	1,450.51	....	596.37	575.00
32	Sedgewick	1,269.00	5,411.50	5,411.50	....	4,511.18	3,024.00
33	Alix	331.33	1,276.19	1,256.77	19.42	375.44	690.50
34	Lloydminster	1,029.34	5,126.14	5,860.66	265.48	265.40	2,495.62

FINANCIAL STATEMENT OF AGRICULTURAL SOCIETIES

	SOCIETY	Government Grant, Paid 1912	Total Receipts	Total Expenditure	Balance on Hand	Assets	Liabilities
35	Camrose	$1,045.53	$1,038.09	$1,038.09	$........	$........	$1,000.00
36	Gleichen	172.47	3,819.47	3,775.13	44.34	7,384.44	3,649.55
37	Three Hills	516.20	1,312.98	1,299.35	13.63	6.45	450.00
38	Irma	453.00	1,057.40	1,015.55	41.85	555.35	775.00
39	Crossfield	515.00	1,952.92	1,875.53	77.39	3,308.39	2,188.75
41	Bowden	541.50	....	....	....	....	....
43	Wabamun	474.50	2,019.69	2,015.66	4.03	605.78	739.75
44	Rexboro	374.83	1,048.51	1,029.90	18.61	146.21	200.00
45	Holden	441.47	875.12	854.57	20.55	20.55	250.00
46	Cochrane	763.33	3,408.09	3,402.45	5.64	1,194.02	675.00
47	Staveley	541.00	2,649.55	2,649.55	....	1,803.16	509.45
49	Strome-Killam	600.20	2,284.61	2,284.61	....	422.95	854.10
50	Trochu	550.30	3,367.95	3,362.70	5.25	5.25	1,261.50
51	Fort Saskatchewan	500.33	1,485.37	1,220.15	265.22	265.22	....
52	Granum	493.63	4,146.63	3,881.71	264.92	2,145.74	1,798.50
53	Langdon and Bow River	498.33	1,704.28	1,618.23	86.05	336.05	816.75
54	Grande Prairie	407.57	1,910.40	1,161.32	749.08	969.08	500.00
55	Castor	474.80	1,512.40	1,512.40	....	....	....
56	Kitscoty	405.64	834.42	805.08	29.34	313.22	200.00
57	Stony Plain	844.50	2,322.03	2,284.81	37.22	1,537.22	883.90
58	Lesser Slave Lake	274.40	773.05	612.99	160.06	206.21	....
59	Swalwell	382.83	1,710.00	1,710.00	....	2,000.00	980.32
60	Entwistle	324.67	815.59	794.70	20.89	146.11	235.70
61	Carmangay	573.00	1,801.23	1,801.23	....	534.17	603.43
62	Provost	760.17	2,205.65	2,205.65	....	158.55	861.80
64	Mid-Pembina	66.00	1,185.63	1,173.48	12.15	380.95	199.77
65	Hardisty	214.97	840.09	829.19	10.90	70.90	53.26
66	Paddle River	262.50	787.30	753.90	33.40	48.40	200.00
68	Warner	193.33	1,106.01	1,066.10	39.91	374.37	461.50
69	Elk Point	61.00	220.35	139.60	80.75	80.75	
70	Wainwright	......	1,953.55	1,908.60	44.95	1,544.95	500.00

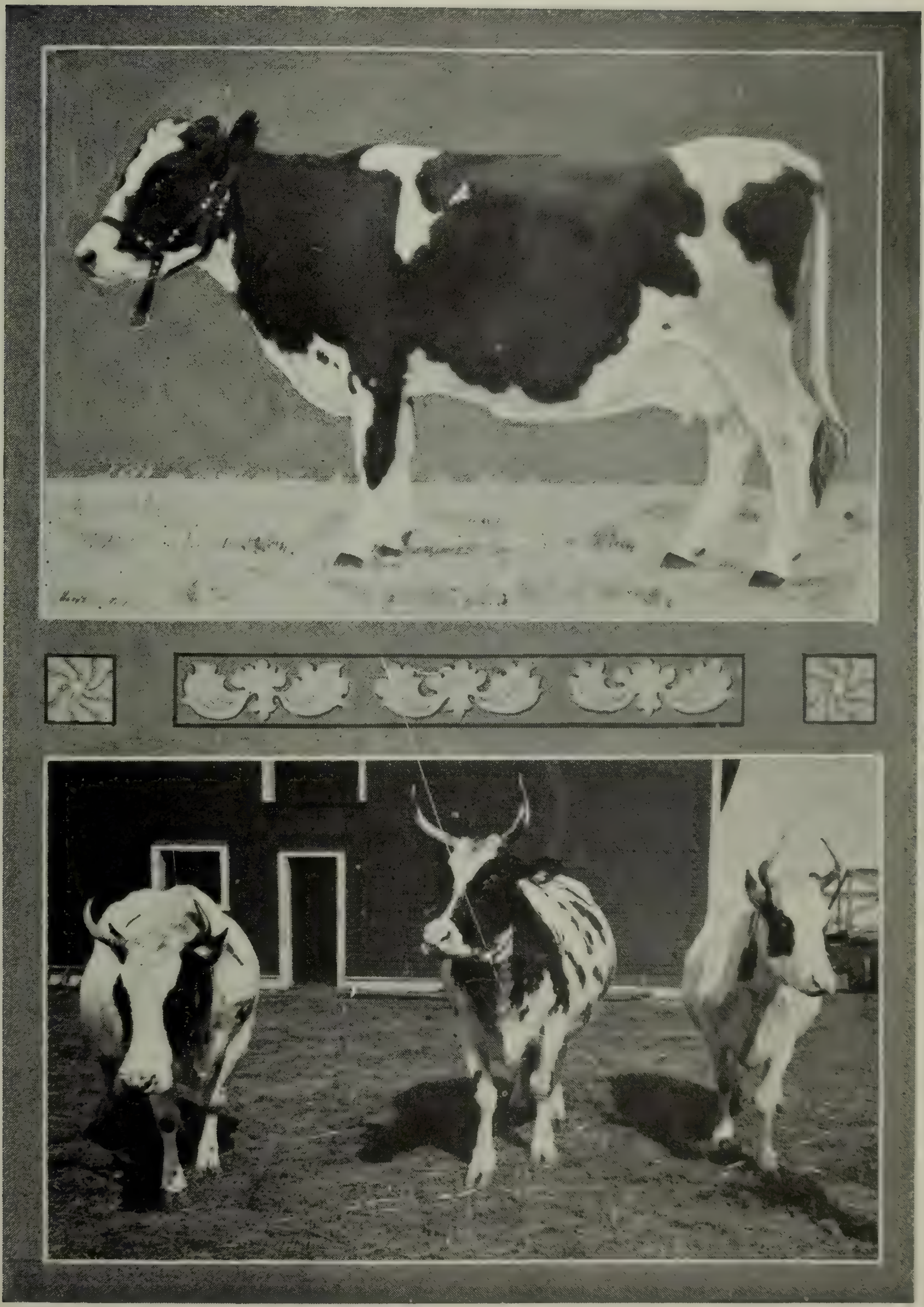
FINANCIAL STATEMENT OF AGRICULTURAL SOCIETIES

	SOCIETY	Government Grant, Paid 1912	Total Receipts	Total Expenditure	Balance on Hand	Assets	Liabilities
71	North Alberta (Kinnoull)	$ 48.00	$ 848.07	$ 780.72	$ 67.35	$ 67.35	$ 245.85
72	Edgerton	486.70	1,216.25	1,216.25		146.25	84.35
73	Munson	52.00	230.75	192.20	38.55	38.55	
74	Legal		80.00	74.79	5.21	42.11	
75	Chauvin		444.35	444.35		10.00	25.70
76	Beaver Lodge		482.00	461.00	21.00	21.00	
77	Onoway		594.35	550.71	43.64	79.95	66.35
78	Nakamun		250.85	224.55	26.30	79.00	256.40
80	Lousana		342.00	367.50		1,062.50	150.00
81	Coronation		3,381.94	3,381.94		3,146.80	3,146.80
82	Peace River		504.50	202.55	301.95	121.70	141.00
85	Winnifred		984.30	926.30	58.00	1,853.00	1,169.50
86	Gadsby		296.05	294.75	1.30	1.30	163.90
87	Edson		58.00	4.35	52.65	53.65	3.00
95	Red Deer		4,262.06	3,981.48	280.58	479.58	322.25
	EXHIBITION ASSOCIATIONS						
99	Calgary	8,000.00	84,163.41	84,163.41		22,924.79	22,924.79
100	Edmonton	8,000.00	98,941.02	89,243.29	9,697.73	19,642.14	4,501.97
6	Lethbridge	8,000.00	21,493.02	21,493.02			8,003.00

	SOCIETY	Date of Exhibition	No. of Entries	Amount paid in Prizes at Exhibition	Amount paid in Prizes for Sports	Amount paid in Prizes Field Grain Competition
1	Cardston	Sept. 20–21	861	$ 1,322.50	$ 57.00	$
2	Magrath	Sep. 17–18	804	1,594.50	174.15	
3	Didsbury	Oct. 3	783	702.50		
4	Innisfail	July 16–17	798	1,696.25		65.00
5	Lacombe	Sept. 18–19	718	1,779.00	51.75	75.00
7	Macleod	Aug. 1–2	1246	2,648.00	1,311.60	145.00
8	Medicine Hat	Aug. 28–29	1736	3,003.00	2,024.07	150.00
9	Olds	Oct. 14–15	616	646.50	15.00	
10	Pincher Creek	Oct. 3	379	441.00	37.85	
11	Ponoka	Oct. 3–4	1100	2,196.90	174.50	
12	Raymond	Sept. 12–13	1426	2,047.75	271.50	
14	Okotoks	July 17–18	590	824.00		
15	Vegreville	Oct. 13	1037	1,164.95		100.00
16	Wetaskiwin	Sept. 26–27	872	1,838.00	198.40	
17	Leduc	Sept. 17	1282	2 231.90	100.00	85.00
18	Nanton	Sept. 30–Oct. 1	408	495.00	191.30	
19	Vermilion	Oct. 11	794	1,216.60		
20	High River	Oct. 17–18	789	1,128.75	423.50	
21	Priddis and Millarville	Oct. 4	460	917.00		
22	Viking and Birch Lake	Sept. 24	931	938.50	15.50	
23	St. Albert	Sept. 20	579	510.75		
24	Manville	Sept. 20	425	677.75		75.00
25	Stettler	Sept. 26–27	455	690.50	250.00	85.00
26	Daysland	Sept. 24	371	501.50	207.74	
27	Claresholm	Aug. 8–9	714	956.50	776.50	
28	Milnerton	Sept. 20	576	1,036.00	28.00	100.00
30	Taber	Sept. 27	644	1,246.00	139.50	170.00
31	Innisfree	Sept. 16–17	525	660.55	24.00	
32	Sedgewick	Oct. 9	665	1,524.00	58.00	150.00
33	Alix	Sept. 25	319	318.00		
34	Lloydminster	Sept. 26	1381	2,637.70		100.00
35	Camrose	Oct. 12	187	1,433.75	75.00	
36	Gleichen	Aug. 30–31	412	589.50	1,146.00	
37	Three Hills	Sept. 17–18	482	627.25		100.00
38	Irma	Sept. 19	506	427.50		

EXHIBITION STATEMENT

	SOCIETY	Date of Exhibition	No. of Entries	Amount paid in Prizes at Exhibition	Amount paid in Prizes for Sports	Amount paid in Prizes Field Grain Competition
39	Crossfield	June 21	403	823.75	....	....
41	Bowden	Oct. 2	487	673.50	....	77.30
43	Wabamun	Sept. 10	299	590.25	120.50	45.00
44	Rexboro	Sept. 18	302	638.50	42.50	....
45	Holden	Sept. 26	287	481.50	5.00	....
46	Cochrane and District	Sept. 10	893	897.40	114.00	....
47	Stavely	Aug. 13	392	843.75	....	....
49	Strome-Killam	Sept. 6	287	578.55	....	65.00
50	Trochu	Oct. 7–8	317	333.90	....	150.00
51	Fort Saskatchewan	Oct. 8	501	674.20	200.00	....
52	Granum	Aug. 6–7	746	1,601.00	367.50	....
53	Langdon and Bow River	Aug. 15–16	350	636.00	....	....
54	Grande Prairie	Sept. 26–27	421	758.00	119.50	....
55	Castor	Sept. 24–25	598	928.75	297.00	....
56	Kitscoty	Sept. 24	298	389.00	....	....
57	Stony Plain	Sept. 21	960	1,161.00	76.50	150.00
58	Lesser Slave Lake	....	....	419.70	....	....
59	Swalwell	Oct. 1	528	565.50	....	....
60	Entwistle	Sept. 12	272	344.50	113.00	....
61	Carmangay	Sept. 24–25	460	623.00	81.00	150.00
62	Provost	Oct. 8	569	616.70	96.50	150.00
64	Mid-Pembina	Sept. 6	230	276.00	5.00	....
65	Hardisty	Sept. 26–27	181	227.00	51.30	....
66	Paddle River	Oct. 2	....	392.25	50.00	....
68	Warner	Sept. 10–11	255	623.25	135.00	....
69	Elk Point	Sept. 25	84	78.75	15.00	....
70	Wainwright	Sept. 25	267	636.25	45.00	....
71	North Alberta (Kinnoull)	Sept. 14	254	448.25	....	100.00



No. 6.—1. Grade Holstein, Vermilion Demonstration Farm
2. Registered Ayrshires, Demonstration Farm, Claresholm

EXHIBITION STATEMENT

	SOCIETY	Date of Exhibition	Number of Entries	Amount Paid in Prizes at Exhibition	Amount Paid in Prizes for Sports	Amount Paid in Prizes Field Grain Competition
72	Edgerton	Sept. 13	885	639.25	3.00	152.00
73	Munson	....	....	....	....	....
74	Legal	....	....	....	....	....
75	Chauvin	Oct. 4	151	260.00	....	....
76	Beaver Lodge	Sept. 11–12	....	353.50	....	....
77	Onoway	Sept. 5	362	372.25	41.50	....
78	Nakamun	Sept. 20	196	256.40	12.50	....
79	Bassano	....	....	....	....	....
80	Lousana	Oct. 4	262	180.50	88.00	....
81	Coronation	Sept. 26-27	215	....	....	....
82	Peace River	....	111	197.25	....	....
85	Winnifred	....	....	....	....	....
86	Gadsby	Oct. 15-66	216	331.10	....	....
87	Edson	Oct. 1	120	182.50	65.00	....
95	Red Deer	Aug. 21–22–23	731	1,495.75	1,080.00	200.00
		EXHIBITION	ASSOCIATIONS			
99	Calgary Industrial	June 29–July 5	4583	17,248.00	18,490.00	....
100	Edmonton	Aug. 12–17	5367	15,048.00	14,605.00	....
6	Lethbridge	Aug. 22–25	2223	7,381.70	2,041.50	265.00

EXHIBITION STATEMENT

	SOCIETY	Amount paid in Prizes Grain Seed Fair	Amount paid in Prizes Stallion Show	Amount paid in Prizes Poultry Show	Amount paid in Prizes Good Farms Competition
1	Cardston	$ 58.00	$	$	$
2	Magrath	92.00		272.00	
3	Didsbury				
4	Innisfail	85.00			
5	Lacombe	64.00			
7	Macleod	144.00	320.00	409.50	
8	Medicine Hat		435.00		
9	Olds	54.00			
10	Pincher Creek	22.00	115.00	118.00	
11	Ponoka				
12	Raymond				
14	Okotoks	51.00	206.00	49.00	
15	Vegreville	88.00	68.00		
16	Wetaskiwin				
17	Leduc	112.00			100.00
18	Nanton	33.00			
19	Vermilion	84.00			
20	High River				
21	Priddis and Millarville	55.00			
22	Viking and Birch Lake	80.00	60.00		
23	St. Albert				
24	Manville				
25	Stettler				
26	Daysland	78.00			
27	Claresholm				
28	Milnerton	58.00			
30	Taber	62.00		194.00	
31	Innisfree	58.00			
32	Sedgewick	110.00			
33	Alix				
34	Lloydminster	92.00			
35	Camrose				
36	Gleichen				
37	Three Hills				
38	Irma	38.00			

	SOCIETY	Amount paid in Prizes Seed Grain Fair	Amount paid in Prizes Stallion Show	Amount paid in Prizes Poultry Show	Amount paid in Prizes Good Farms Competition
39	Crossfield				
41	Bowden	59.00			
43	Wabamun				
44	Rexboro				
45	Holden				
46	Cochrane and District				
47	Stavely	71.00			
49	Strome-Killam	64.00			
50	Trochu	89.00	99.00		
51	Fort Saskatchewan		115.20		
52	Granum	110.00		981.25	
53	Langdon and Bow River	61.00			
54	Grande Prairie				
55	Castor	47.00			
56	Kitscoty				
57	Stony Plain	64.00			
58	Lesser Slave Lake				
59	Swalwell				
60	Entwistle				
61	Carmangay				
62	Provost	49.00			
64	Mid-Pembina				
65	Hardisty				
66	Paddle River				
68	Warner				
69	Elk Point				
70	Wainwright				
71	North Alberta (Kinnoull)				
72	Edgerton				
73	Munson				
74	Legal				
75	Chauvin				
76	Beaver Lodge				
77	Onoway				
78	Nakamun				
79	Bassano				

EXHIBITION STATEMENT

	SOCIETY	Amount Paid in Prizes for Seed Grain Fair	Amount Paid in Prizes for Stallion Show	Amount Paid in Prizes Poultry Show	Amount Paid in Prizes Good Farms Competition
80	Lousana				
81	Coronation				
82	Peace River				
85	Winnifred				
86	Gadsby				
87	Edson				
95	Red Deer				
	EXHIBITION ASSOCIATIONS				
99	Calgary				
100	Edmonton				
6	Lethbridge				

POULTRY SHOWS.

Poultry shows have been held by the following societies and associations:

Granum Agricultural Society.
Pincher Creek Agricultural Society.
Macleod Agricultural Society.
Taber Agricultural Society.
Magrath Agricultural Society.
Medicine Hat Poultry and Pet Stock Association.
Edmonton Poultry and Pet Stock Association.
Lethbridge Poultry and Pet Stock Association.
Calgary Poultry and Pet Stock Association.

STALLION SHOWS.

Macleod, Trochu, Fort Saskatchewan, Vegreville, Pincher Creek, Viking, Edmonton, Calgary, Medicine Hat.

Respectfully submitted,

C. E. LEWIS,
Superintendent of Fairs and Institutes.

8.—*REPORT OF LIVE STOCK COMMISSIONER.*

Sir,—I beg to submit herewith a report of the work carried on in the interests of the live stock industry during the year by the office of the Live Stock Commissioner.

LIVE STOCK CONVENTIONS.

On February 12th and 13th a convention was held in Ottawa for the purpose of discussing the live stock situation in Canada. The following representatives of the live stock interests of Alberta were present:

Mr. Geo. Lane, President Alberta Horse Breeders' Association.
Mr. Jno. A. Turner, President Alberta Clydesdale Association.
Mr. W. Thorne, President Alberta Percheron Association.
Mr. Bryce Wright, President Alberta Sheep Breeders' Association.
Mr. Lew Hutchinson, President Alberta Swine Breeders' Association.
Mr. Rice Shepherd, Vice Pres. Alberta Swine Breeders' Association.
Mr. E. L. Richardson, Secretary Alberta Live Stock Associations.
Mr. W. J. Stark, Secretary Alberta Provincial Live Stock Ass'n.
Mr. H. C. McMullen, General Live Stock Agent, C. P. R.
Mr. E. G. Palmer, Expert in Transporting Chilled and Frozen Meats.
W. F. Stevens, Live Stock Commissioner.

The following addresses were delivered by the Alberta representatives on that occasion:

"Western Beef Cattle," by Geo. Lane, Esq., Calgary.
"The Chilled Meat Trade," by Mr. E. G. Palmer, Edmonton.
"Present Conditions of the Live Stock Industry in Alberta," by Mr. W. F. Stevens, Edmonton.

During the latter part of March and the first half of April the province was favoured with a series of lectures by Messrs. W. T. Ritch and C. M. McRae, both of Ottawa, on the subject of "Wool and Mutton Production." Meetings were held at the following places: Irvine, Lethbridge, Sedgewick, Wabamun, Nakamun, Dunstable, Belvedere and Vermilion. The attendance at all of these meetings was invariably good and the interest taken, keen. Mr. Ritch confined his remarks entirely to the proper preparation of wool for market. Mr. McRae spoke on the general care, management and breeding of sheep.

CATTLE MARKETS.

On April 16th the writer received a communication from Mr. E. J. Fream, secretary of the U. F. A., to the effect that there was in the Medicine Valley of Alberta about 250 head of grain fed cattle for which the owners were unable to secure a buyer, although the buyers who had operated throughout this district had frequently been communicated with. The writer visited the district named and assured himself that the cattle were of good type and well fed. The farmers admitted that they had been offered a few weeks previous, in some instances 6¼c per lb., in others 6½c per lb., and one party who had an exceptionally fine lot admitted that he had been offered 6¾c per lb. for them. They all explained, however, that the reason they had not accepted the offer made them was that they had read a widely published interview in which a prominent packer had predicted that prices would go to 7c or over before grass cattle would be available. The writer informed them that according to Winnipeg, Toronto and Smithfield quotations, prime export steers were not worth more at that time than 6½c per lb., and plainer sorts from 6c to 6¼c per lb., and he advised them to sell when offered that sum, unless advised of an upward movement in eastern quotations, or were prepared to hold their animals for from six weeks to two months. He also informed the farmers that if they would get together and contribute their best steers toward making a trial shipment to Toronto or the Old Country, he would accompany the shipment if they desired it.

He went to the coast and interviewed the leading buyers there and found that they were expecting lower prices for beef cattle and were buying only enough to carry them along from day to day. He decided that unless a local shortage could be brought about by exporting such as were fit for export, Alberta feeders would receive little for their labour in feeding cattle during the winter of 1912. He communicated with Winnipeg commission houses and asked that weekly market quotations be sent to the parties whose names had been reported to him. He also cabled Smithfield, England, and requested to be advised by cable of all market changes. From the prices quoted, he informed the feeders of the probable value of prime cattle weighing 1300 lbs. or over at Alberta points, and he again suggested that each feeder contribute from 6 to 10 head of his best animals toward making a trial shipment to the English market.

Before any definite action had been taken, Messrs. Rice and Whaley, of Toronto and Winnipeg, sent a buyer to Alberta who bought and shipped out 900 head. Eastern markets took on a firmer tone about this time and buying in Alberta became active at about 6½c per lb. for prime steers and as high as 7c was paid for a few extra good lots.

LIVE STOCK SHIPPING REGULATIONS.

On June 25th, 1912, the writer attended a convention of live stock breeders of Manitoba, at Brandon, for the purpose of discussing the proposed live stock regulations which were submitted for approval to the Board of Railway Commissioners on Sept. 11th, 1911, and which are fully set forth in his report for that year, and two days later a convention at Calgary which had been called by Mr. E. J. Fream, secretary of the U. F. A., for the same purpose. At this convention there were present:

Mr. Jas. Walters, Clive, Alta.

Mr. John A. Turner, Calgary, Alta.

Mr. Bryce Wright, De Winton, Alta., representing the Alberta Live Stock Associations.

Mr. D. W. Warner, Edmonton, Alta.

Mr. David Stewart, Edmonton, Alta.

Mr. Cresswell, Edmonton, Alta., representing the Alberta Provincial Live Stock Associations, Limited.

Mr. R. C. Harvey, Raymond, Alta.

Mr. C. S. Crest, Lethbridge, Alta., representing the Southern Alberta Wool Growers' Association.

Mr. Adzhead, representing the Central Alberta Stock Growers' Ass'n.

Mr. E. J. Fream, Calgary, Alta., representing the United Farmers of Alberta.

On November 25th, 1912, the writer attended a meeting in Calgary to further discuss these regulations with Mr. Nixon, chief traffic officer of the Board of Railway Commissioners, and Mr. M. J. McCaul, inspector for the Board of Railway Commissioners. There were present at this meeting, besides the writer, Mr. E. J. Fream, Mr. D. W. Warner, Mr. E. L. Richardson and Mr. John Turner.

At this meeting these regulations were considered from a technical standpoint and a few changes were made in them in order to make them workable throughout the Dominion.

Following is a copy of such regulations as amended at this meeting:

PROPOSED REGULATIONS GOVERNING SHIPMENTS OF LIVESTOCK.

Interpretation.

In these regulations unless the context otherwise requires:

(a) "Agent" referring to a station agent shall mean any railway station agent.

(b) "Applicant" referring to an applicant for cars shall mean any corporation, co-partnership or person who owns livestock for shipment in car lots, or who is the agent of the owner of such live stock.

(c) "Livestock" shall include horses, cattle, sheep, swine, mules, asses and goats.

(d) "Car of livestock" shall mean any railway car loaded with livestock.

(e) "Station" shall mean any railway station at which the railway company is represented by an agent.

(f) "Sub-station" shall mean any point or place on a railway at which freight is received or shipped and at which the company is not represented by an agent.

(g) "Feeding Point" shall mean any place or point at which there is maintained a stock yard or yards for the feeding, watering and resting of live stock while en route.

(h) "Shipper" shall mean any applicant to whom one or more cars have been allotted.

(i) "Attendant" shall mean the person named by the shipper in the way bill as being in charge of one or more cars of livestock.

(j) "Company" shall mean any railway company doing business or operating a railway in Canada, over which the Parliament of Canada has legislative authority.

(k) "Spotting Cars" shall mean the placing of same at a stock yard so that they may be loaded or unloaded conveniently, or where there is no stock yard, at a loading chute.

(l) "Book Rest" shall mean the signifying by one or more members of a train crew that he or they are in need of rest.

(m) "Way Freight" shall mean any train sent out by the company which may deliver or take out freight at any station or sub-station in carload lots or less than carload lots.

(n) "Pick Up" shall mean any train sent out by the company which may deliver or take out freight at any station or sub-station in carload lots only.

(o) "Car Repairer" shall mean any employee of the company capable of making minor repairs to a stock car.

2. When an application for one or more cars is received by the agent of the company, the same shall be immediately entered in a book to be kept by that company for this purpose, and said book shall contain:

(a) The hour and date when said application was received.
(b) The name of each applicant.
(c) The place where each car is to be loaded.
(d) The hour and date.
(e) The number of each car allotted.
(f) The hour and date when same was loaded.
(g) The destination of each car.

3. Cars shall be placed for loading at the stock yards or loading chute, as mentioned in said car order book.

4. Application may be made in person, by mail, telephone or telegraph to the agent in charge of the station or sub-station from which shipment is to be made, or to other officers authorized to receive such application.

5. When the company cannot supply or furnish stock cars for all applicants it may substitute box cars therefor, in proportion of three box cars for every two stock cars applied for.

(b) When box cars are supplied in lieu of stock cars, as provided in the preceding section, the minimum weight to be charged by the company shall be the weight the company would have been entitled to charge had stock cars been supplied or furnished.

(c) Before supplying box cars in lieu of stock cars, all the stock cars available at the station, or sub-station, shall be supplied first in the order in which the applications were received by the agent. This rule may be varied if an applicant signifies a willingness to accept box cars in lieu of the stock car or cars to which he may be entitled.

6. The company shall provide at each stock yard or loading chute a sufficient supply of sand or cinders, conveniently located to the loading chute or platform.

7. When a shipment is to be made during the winter months the company shall, as far as practicable, supply box cars when application is made therefor.

8. When requested to do so by the shipper, the railway company shall supply double deck cars with a minimum capacity of 27,000 pounds for the shipment of sheep and swine; but when not supplied the minimum for each carload shall be 15,000 pounds.

9. Whenever a shipper has been supplied with one or more cars that are in need of repairs, he shall notify the agent of the same, and if the agent fails to cause the necessary repairs to be made within a reasonable time, the shipper may make such repairs, or may cause same to be made, and upon presentation of a voucher showing the cost of the said repairs, shall be given a credit on his way bill for the amount of said voucher.

10. Every agent on reasonable demand shall advise the shipper whether or not the train on which the latter proposes to ship live stock is running on time and of the hour at which the said train will probably arrive.

11. Shipments of live stock when hauled by a way freight or pick up may be loaded or unloaded while en route in the direct line of transit between the original shipping point and destination, at an extra charge of three dollars ($3.00) per car for the first stop-off, and two dollars ($2.00) per car for each additional stop-off thereafter.

12. Stock yards containing feeding racks and watering troughs shall be provided at junctions, divisional and other points where delays occur in forwarding trains, which yards shall have a capacity sufficient for feeding and watering such consignments of live stock as ordinarily pass through such points.

13. Whenever it is known that there will be a delay of four or more hours in forwarding one or more care of live stock from a junctional, divisional or feeding point, the company shall at once so advise the attendants who have loaded or have been ordered to load the stock in their charge of the probable length of such delay, and at points where there is an engine maintained or available for switching purposes, the company shall cause said cars to be spotted for unloading if requested to do so by the attendant.

14. Cars containing live stock shall be placed or spotted by the company for unloading with as little delay as possible and in no case should such delay exceed two hours after arriving at point of destination or feeding point.

15. Trains containing shipments of live stock shall have preferred movement over all dead freight trains.

16. It shall be the duty of the railway company to provide reasonable accommodation for the attendants of live stock on the same train in which said live stock is hauled, and such accommodation shall be open and available to all attendants on live stock in any train as soon as train is made up.

17. Any person, co-partnership, company or corporation who shall violate any of the provisions of these regulations, shall be tried and punished by the Board of Railway Commissioners for Canada.

18. The imposition of any such penalty shall not lessen or effect any other liability which any company, co-partnership, person or corporation may have incurred.

19. Complaints for violation of these regulations shall be submitted to the railway company and the Board of Railway Commissioners, within ninety days from the time the violation is made.

RECORD YEAR FOR ALBERTA LIVE STOCK.

The province achieved no little distinction during 1912 in live stock matters. Mr. C. Julian Sharman of Red Deer, completed a three year test of his now celebrated Jersey cow, Rosalind of Old Basing. One result of which was the establishment of a new three year butter record for the British Empire. The official figures are as follows:

Highest milk yield in one day	52 lbs.
Highest milk yield in one month	1,471½ lbs.
Highest milk yield in one year	15,700 lbs.
Average test 5.16 per cent.	
Butter in one year	1031.89 lbs.
Butter in three years	2504.39 lbs.
Milk in three years	37,847¼ lbs.
Actual returns for cream and skim milk in three years	$1007.50
Value of three heifer calves not known, but have refused	$2000.00

Mr. Geo. Lane of Calgary shipped a train load of grass fat cattle from his ranch at Brooks, Alberta, to Chicago, and for 300 selected cattle he received $10.25 per cwt. or 50c per cwt. more than was ever before paid for range cattle on the Chicago market.

In December Mr. Simon Downie of Carstairs, Alberta, exhibited at the Toronto Fat Stock Show a carload of pure bred, grain fed, Hereford steers. These cattle had been shipped in an open stock car from Carstairs to Toronto; they were ten days on the road and were exhibited two days after their arrival. In spite of these handicaps they were accorded first prize over their eastern stall fed competitors.

RECOMMENDATIONS BEFORE RANCH COMMISSION.

On November 13th the writer appeared before the Ranch Commission sitting at Lethbridge and again on the 14th at Pincher Creek and submitted to that body for consideration recommendations regarding the proper disposition to be made of our non-agricultural lands.

RECOMMENDATIONS.

Those lands which now are or which may hereafter be declared to be non-agricultural lands should be so administered as to induce the occupants thereof to adopt mixed farming methods as rapidly as the progress of scientific agriculture make the adoption of such methods possible or advisable and they should be classified on the following basis:

1. Lands on which live stock can be kept throughout the year.
2. Lands on which live stock can be kept only during the summer season, whether because of climatic conditions or departmental regulations.
3. Grant closed leases for a period of fifteen years, on lands upon which live stock can be kept throughout the year, in blocks of not to exceed ten sections, and place the growers of all classes of live stock on an equal footing in the matter of acquiring such leases, giving the leassee the privilege of purchasing not to exceed two sections of his leasehold at the expiration of the term of his lease.
4. Classify lands, upon which live stock can not be kept throughout the year, into horse, cattle and sheep lands according to the kind of live stock they are best adapted to grazing and admit on such lands, for grazing purposes, under suitable regulations, and upon payment of a reasonable fee, live stock of the kind corresponding to such classification, giving preference to small holders whose winter headquarters lie nearest the lands to be grazed.

EXPLANATIONS.

By non-agricultural lands, is meant lands that are now or may hereafter be declared to be not available for homesteading or purchase for any of the following reasons:

1. Because the nature of the soil is such as to render them unsuitable for agriculture under present conditions, or conditions that are likely to prevail in the near future.
2. Because climatic conditions are such as to make successful crop growing uncertain.
3. Because such lands have been set aside for forest reservations or such other public uses as would not render them unsuitable for grazing purposes.

The reasons for the above conditions in the terms of the leasehold suggested are:

1. That ordinarily six sections are sufficient to graze a herd of live stock sufficiently large to support one family, and six sections should therefore be made the standard size of a leasehold, but there might be topographical or other conditions that would require a larger area in order to utilize the land to the best advantage. For this reason it is suggested that a larger area may under certain conditions be included in the lease, but in no case exceeding ten sections.

2. With leases of this size a sufficient number of families can be gathered into one township to support a public school.

3. Special provision should be made in each lease to the effect that where there are any children of school age desiring school privileges a tax should be levied for that purpose, leaving the ranchers free to decide whether a school house should be built or the pupils maintained at a public or private school elsewhere.

4. Special care should be taken to formulate a system that will not compel stockmen with families to leave the land and move into some town or village in order to educate their children.

5. Since extensive improvements are necessary to every ranch, such as buildings, corrals and watering places, and as a rancher is not likely to develop his leasehold unless he is assured that he will be permitted to enjoy the fruits of his labour for a sufficiently long time to repay him for the labour and moneys expended, inducements should be held out to him to surround himself with such conveniences as will enable him to conduct his business economically and with satisfaction to himself. It is therefore suggested that he be given a closed lease for not less than fifteen years, and that he should have the right to purchase not to exceed two sections of his lease hold at a price named in the lease.

6. In cases where a leasehold consists of less than six sections the lessee should not be permitted to purchase more than one-third of the lands under lease.

The writer again appeared before the Ranch Commission at Pincher Creek on Nov. 14th, 1912, and submitted the following:

Since the meeting at Lethbridge yesterday, I find that I did not make myself clear to the stockmen as to the difference between a lease on the prairie and a grazing permit in the forest reserve. In their remarks after the commission had adjourned, I found them incessantly getting the two systems confused, and speaking of getting leases inside of the forest reserves. I wish to make it clear that there was no intention of asking for leases inside the forest reserve, but that grazing permits alone be granted therein, and that these be in force only during the summer months. I would suggest that the method of administering the forest reserves be somewhat as follows:

A. Classify the lands included in the forest reserves into (a) horse, (b) cattle, and (c) sheep areas, according to the kind of live stock they are best adapted to grazing. In determining these different areas, I think it would be best to follow natural boundaries as nearly as possible. In most cases these natural boundaries will be mountain ranges or streams not easily forded.

The basis of this classification should be somewhat as follows:

(a) Districts having a large percentage of infertile soil, whether sandy or hard clay and which are watered by running streams and are comparatively free from sloughs should be described as horse areas. Although all kinds of live stock do well on them, this is the only kind of land on which horses can be kept with profit.

(b) Districts in which the vegetation is somewhat rank and which contain a considerable number of sloughs, but are still outside of the area in which flies and mosquitoes prevent the animals from thriving, should be described as cattle areas.

(c) Districts in which flies and mosquitoes torment both horses and cattle to such an extent that they do not thrive, also lands in which the vegetation consists chiefly of weeds and wild flowers, should be classed as sheep areas.

B. Admit on such lands for grazing purposes only, during the months of June, July, August, September and October, under suitable regulations, live stock of the kinds corresponding to such classification.

C. Adopt a system of regulations somewhat as follows:

(a) Some time in January or February, let the Forestry Department announce through the proper channels that a specified number and kind of live stock will be admitted upon each reservation and request all persons desiring the privilege of grazing live stock of the kind specified, upon such reservation, to make application therefor, stating the number and kind of live stock he desires to have grazed, his post office address, and the section, township and range in which the winter headquarters of the animals to be grazed is situate.

(b) If the number of applications exceeds the estimated carrying capacity of a given area and thus make it necessary to refuse some applicants entirely, or all applicants to a limited extent, my plan would be first to refuse grazing privileges to applicants who have large bunches and whose winter headquarters are at a considerable distance from the area to be grazed and to reduce as heavily as need be large bunches close to the reserve, in short, as stated in the outline, I would give preference to small holders whose winter headquarters lie nearest the lands to be grazed.

(c) If there are not sufficient applications to fill the estimated carrying capacity of a given area with the kind of live stock to which it is declared to be best adapted, live stock of another class may be admitted up to the carrying capacity of that district.

(d) In case, in the course of a year or two, it is found that the land is being over grazed the number of animals admitted in a given district should be reduced.

(e) In case it is found that unused vegetation is accumulating on the ground, a larger number of animals should be admitted.

(f) Forest rangers should be given the power to deal summarily with all cases where the herdsmen of one class of live stock are found or are reported to be grazing their animals outside of the district allotted to them; providing, of course, for an appeal to higher authority.

(g) As it will be necessary in many cases to trail sheep through districts allotted to cattle, when passing to and from their summer range, it will be necessary to define the route along which sheep must be kept and either to require a certain number of miles to be travelled each day or to have the journey through the forest reserve made under the supervision of a forest ranger who should be authorized to deal summarily with all parties violating the regulations, even to the point of depriving them of the privilege of grazing or herding stock in the forest reserve.

D. A charge should be made for grazing privileges at a fixed price per head of stock admitted. This price should not be more than is necessary to pay the cost of administration and policing. The object should be to establish a flourishing live stock industry and not to treat the forest reserves as if they were expected to pay dividends.

LIVE STOCK MARKETS.

Aside from the depression referred to in the cattle market during April and May and a similar depression in the sheep market at about the same time which necessitated the shipping to Toronto of six double deck loads of grain fed sheep and lambs by Mr. H. A. Suggitt and Mr. B. S. Pawson, both of Coaldale, Alberta, prices throughout the year have been very satisfactory.

The price of horses remains very much the same as a year ago. Draft teams find ready sale at from six hundred to seven hundred dollars per team. The only classes that appear to have declined in value are the light harness and high stepping classes. These seem to have suffered somewhat because of the advent of the motor car. The nondescript and blemished classes are at present a shade lower than a year ago.

SHEEP.

The sheep industry made rapid strides during the year just past. The advantage of keeping this class of live stock on a grain farm for the purpose of destroying weeds, gleaning the stubble fields and utilizing unmarketable grain is becoming apparent to the farmers. According to a report received from the Department of Customs, 138,515 sheep were received at the port of entry at Coutts for feeding and breeding purposes. The estimated number of sheep in the province at the present time is 366,946.

SWINE.

Interest in the swine industry is very much on the increase throughout the province and the quality of the animals coming to market at the present time is far superior to those marketed in the past. The estimated number of hogs in the province at the present time is 536,915.

Respectfully submitted,

W. F. STEVENS,
Live Stock Commissioner.

9.—*REPORT OF THE PROVINCIAL MEDICAL OFFICER OF HEALTH*

To the Honourable,
The Minister of Agriculture.

SIR,—

I beg leave herewith to submit the annual report of the Public Health Branch of the Department of Agriculture, for the year ending Dec. 31, 1912.

CHANGE OF PERSONNEL.

L. E. W. Irving, D.S.O., M.D., Provincial Medical Officer of Health, for the past six years, resigned on May 1st, and on June 1st I was appointed to succeed him.

PROVINCIAL BOARD OF HEALTH.

The Provincial Board of Health met at different times during the year and transacted such business as was brought before it.

Plans and specifications for the installation or extension of water and sewerage systems were submitted to the board under Sec. 11 and 12 of The Public Health Act; and upon the approval of the board, certificates were issued to the following cities and towns:

WATERWORKS.—Edmonton, Calgary, Bassano, Coleman, Vegreville, Gleichen, Medicine Hat, Athabasca Landing and Red Deer.

SEWERAGE.—Calgary, Edmonton, Medicine Hat, Wetaskiwin, Vegreville, Bassano, Macleod, Red Deer, Ponoka.

The regulations made by the Provincial Board of Health, under power conferred by The Public Health Act, have on the whole worked very satisfactorily. It has been found necessary during the year to make some slight alterations for their betterment.

In view of the erection of rural municipalities, and the power granted them under The Rural Municipalities Act, of caring for contagious, infectious and communicable diseases, under the supervision of the provincial medical officer of health, it will be necessary to amend The Public Health Act, providing for local boards of health in rural municipalities.

CONTAGIOUS, INFECTIOUS AND COMMUNICABLE DISEASES.

The following are the number of cases of contagious and infectious diseases as set opposite their names, which have been received at this office:

Typhoid	866
Smallpox	146
Chickenpox	242
Diphtheria	519
Scarlet Fever	807
Measles	2095
Mumps	48
Whooping Cough	91
Tuberculosis	38
Other diseases	97

The general increase in the number of contagious and infectious diseases reported is due, first, to the better system of reporting cases, under the new public health regulations; and second, to the great increase in population.

TYPHOID FEVER
(Within Municipalities)

POST OFFICE	SEX		MONTH OF FEBRUARY, 1913												AGE								
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	TOTAL
Athabasca Landing	10	2							6	2		4	2				6	4	2				12
Bassano	13	4								5	4	6					3	5	6	2	1		17
Blairmore	6	4									7	2		1			4	2	3				10
Calgary	200	56		1	1	2	2	2	10	107	83	38	2	8		3	29	95	115	13	1	1	256
Camrose	10	2					1	1	1	1	3	3	1	1		1	2	5	4				12
Carlstadt	1	2										1	1	1			1	1	1				3
Claresholm	1											1					1						1
Edmonton	185	78	3	11	7	8	1	7	32	32	61	67	32	2	1	10	30	86	115	16	4	1	263
Ft. Saskatchewan	3		2										1				2	1					3
High River	2	1			3													2	1				3
Innisfail		1									1								1				1
Lethbridge	13	10		13	5	5										2	5	8	7	1			23
Lille	2	2			4													2	2				4
Macleod	4	2		1		3						2				1	2	2	1				6
Olds	3	7						2		6	1	1						4	4	1	1		10
Red Deer	6	1			1		2		2		2							5	2				7
St. Albert	1	2				1		2											3				3
Stettler		1			1														1				1
Stony Plain	1	2			3												2	1					3
Taber	1									1									1				1
Trochu	1									1									1				1
Vegreville	6	3			2			3						4		2	4	2	1				9
Wainwright	4	4		4					4							1		4	3				8
Totals	473	184	5	30	27	19	6	17	55	155	162	125	39	17	1	20	91	229	274	33	7	2	657

TYPHOID FEVER
(In Rural Municipalities)

POST OFFICE	SEX		MONTH OF FEBRUARY, 1913												AGE								TOTAL
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	
Alexandra	5			4							1							1	3		1		5
Cochrane	4	1									2	3					2			3			5
Didsbury	3	1							1	1	1	1					1	2	1				4
Gleichen	28	1								14	3	11	1				1	11	17				29
High River	2	4			2	2				2							2	3	1				6
Lac Ste. Anne	8								2		3	3						3	4	1			8
Lethbridge	5	1		1	2			2				1						4	1	1			6
Macleod	1			1													1						1
Medicine Hat	12	2				1				2	5	4		2		2	2	4	6				14
Nanton	1											1							1				1
Okotoks	5									4	1							1	4				5
Pakan	5	5		3						1	2		4				4	5	1				10
Pembina	1								1										1				1
Red Deer	10		2	1	5						2							7	3				10
Sedgewick	1									1									1				1
St. Albert	7	1	1		1				5			1						3	4	1			8
Stettler	2			1			1											1	1				2
Strathcona	9					2			4	3							5	4					9
Sturgeon	5	2	1					1	5								1	3	3				7
Vegreville	3	1									3	1						2	2				4
Vermilion	1	3								4							2	1	1				4
Victoria	1	1										2						2					2
Totals	119	23	4	11	10	5	1	3	18	32	23	28	5	2		2	21	57	55	6	1		142

SCARLET FEVER
(Within Municipalities)

POST OFFICE	SEX		MONTH OF FEBRUARY, 1913												AGE								
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	TOTAL
Bassano	2	2			2								2				2	2					4
Blairmore		1											1				1						1
Camrose	2						2										1	1					2
Calgary	201	150	29	41	43	53	55	61	17	6	12	9	9	16	5	70	173	52	51				351
Carlstadt		6						6								3	3						6
Cayley	2	3											5			2	3						5
Coalgate		1										1					1						1
Grassy Lake	4	3								3		1	2	1		1	5		1				7
Edmonton	40	45		5	9	14	9	8	13	5	3	11	5	3		16	45	14	8	1	1		85
High River		2				1								1		1			1				2
Innisfail	8	6				4		3	3				4		1	2	9	1	1				14
Lacombe	1													1		1							1
Lethbridge	50	68		14	45	28	20	8	2	1						18	73	15	11	1			118
Macleod	4	1		1					4							3	1		1				5
Medicine Hat	10	9		3		5	9		1					1	1	5	10		3				19
Olds	1	3				2							2			2	2						4
Penhold		2				2											2						2
Raymond	1													1		1							1
Red Deer	1	1				2											2						2
Stettler	1	2						3									1	2					3
Strathcona		1												1							1		1
Totals	328	306	29	64	99	111	95	89	40	15	15	22	30	25	7	125	334	87	77	2	2		634

SCARLET FEVER
(In Rural Municipalities)

POST OFFICE	SEX		MONTH OF FEBRUARY, 1913												AGE								
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	TOTAL
Alexandra	1	3	3			1											1	1	2				4
Camrose	1			1											1								1
Cardston	8	2					7	3									10						10
Claresholm	2	1	1	2													2	1					3
Didsbury		2								2							2						2
Ft. Saskatchewan	2	2												4		1	1		2				4
Gleichen		4				1					2	1				1	2		1				4
High River	14	13				6	9			4	1	6	1		1	5	13	5	3				27
Innisfail	7	6			1	2					10					1	9	3					13
Lacombe	7	18							6				19			1	11	11	1	1			25
Lac Ste. Anne	2					1	1											1	1				2
Lethbridge	8	3				5	1		1	1		1	1	1		4	6		1				11
Medicine Hat	11	5				1	2	8		5						4	12						16
Nanton	2	3	1	1	1	1				1							3	2					5
Olds	4	2		6													6						6
Pakan	10	2			4	1	4			3					1	2	9						12
Pincher Creek	1	1					2										2						2
Red Deer	4	4					8								1	2	5						8
Rocky Mountain	2	1		1			1	1								2			1				3
Sedgewick	2	1				2		1								2		1					3
Stettler	2	4				2	4										3	3					6
Strathcona	1							1										1					1
Vegreville		1						1							1								1
Vermilion	1	3					4								2	2							4
Totals	92	81	5	11	6	23	43	15	7	16	13	8	21	5	7	27	97	29	12	1	....	....	173

MEASLES
(Within Municipalities)

POST OFFICE	SEX		MONTH OF FEBRUARY, 1913												AGE								
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	TOTAL
Calgary	207	145	...	12	...	48	72	88	50	22	14	20	13	13	31	68	173	46	32	2	...	...	352
Carlstadt	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Cayley	4	4	...	...	1	7	...	...	...	...	...	...	...	...	1	...	7	...	...	...	...	...	8
Didsbury	...	3	...	1	...	2	...	...	...	...	...	...	...	...	2	...	1	...	...	...	...	...	3
Edmonton	580	519	192	489	217	77	49	33	14	3	8	2	...	15	44	205	670	128	52	...	...	...	1,099
Edson	2	4	...	...	1	2	...	1	...	1	...	...	1	...	2	1	1	1	1	...	...	...	6
Ft. Saskatchewan	19	13	13	7	10	2	...	...	...	...	...	...	...	...	1	6	17	7	1	...	...	...	32
High River	63	61	45	52	5	20	...	1	1	...	...	...	...	...	6	26	75	10	7	...	...	...	124
Leduc	2	...	1	1	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	2
Lethbridge	49	44	...	...	5	3	10	...	37	30	6	1	1	...	10	30	39	9	4	1	...	...	93
Macleod	17	21	...	...	12	26	...	...	...	...	...	...	...	...	1	10	20	5	2	...	...	...	38
Mannville	7	8	...	15	...	...	...	...	...	...	...	...	...	...	...	4	11	...	...	...	...	...	15
Medicine Hat	41	24	6	...	...	...	6	5	5	...	...	...	...	43	3	14	39	3	6	...	...	...	65
Nanton	1	4	...	...	...	...	...	...	5	...	...	...	...	...	...	1	4	...	...	...	...	...	5
Olds	...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1
Red Deer	4	5	...	...	3	6	...	...	...	...	...	...	...	...	...	1	8	...	...	...	...	...	9
Sedgewick	2	1	...	...	...	...	1	2	...	...	...	...	...	...	...	1	2	...	...	...	...	...	3
St. Albert	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Stony Plain	8	8	...	...	16	...	...	...	...	...	...	...	...	...	2	3	11	...	...	...	...	...	16
Vegreville	42	32	...	...	28	1	2	...	...	...	...	1	15	27	2	5	51	15	1	...	...	...	74
Vermilion	2	...	...	...	2	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	2
Wainwright	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Totals	1,053	897	258	578	301	195	140	130	112	56	28	24	30	98	110	375	1131	224	107	3	...	...	1,950

MEASLES
(In Rural Municipalities)

POST OFFICE	SEX		MONTH OF FEBRUARY, 1913												AGE								
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	TOTAL
Alexandra	1	1	1	1													1	1					2
Camrose	4			2	2										1				3				4
Claresholm		1		1													1						1
Cochrane	1	1					1	1								2							2
Didsbury	1					1												1					1
Gleichen	4	3		1		5		1									3	4					7
High River	37	27		11	34	11	1	5				2			6	15	32	6	5				64
Lac Ste. Anne	5			1		2	2											2	3				5
Leduc	5	3		3	1	2								2	2	1	3	2					8
Medicine Hat	5	1	2						1					3				5				1	6
Nanton	2					1		1									1	1					2
Rocky Mountain	12	8						1	19						1	5	14						20
Sedgewick	1							1									1						1
Strathcona	3	2				5											4	1					5
Sturgeon	4	3		1			4	2								1	1	4	1				7
Vegreville	1								1								1						1
Vermilion	3	3									6						6						6
Victoria	1	2					3										3						3
Totals	90	55	2	21	37	27	11	12	21	...	6	2	..	5	10	24	71	27	12	...	...	1	145

DIPHTHERIA
(Within Municipalities)

POST OFFICE	SEX		MONTH OF FEBRUARY, 1913												AGE								TOTAL
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	
Athabasca Landing		2								1	1							2					2
Calgary	87	69	15	4	7	14	19	11	10	23		23	25	5	2	27	55	33	32	7			156
Carlstadt	5	1						6								2	4						6
Didsbury		1					1									1							1
Edmonton	65	63		3	4	4	7	7	7	5	23	24	23	21	2	19	61	17	27	2			128
Ft. Saskatchewan	2	2	4														3	1					4
Innisfail	1	3								3			1			1	2	1					4
Lacombe	1	2												3			2	1					3
Lethbridge	4	1									2	2	1			3	2						5
Macleod	2											2					1		1				2
Medicine Hat	4						2		2							1		1	2				4
Nanton		1				1													1				1
Olds	2													2		1		1					2
Pakan	10	1								11								6	5				11
Pincher Creek		1					1												1				1
Red Deer	1	2								3							3						3
Vegreville	13	13						13			12		1		2	3	19	1	1				26
Wainwright		2								2							1		1				2
Totals	197	164	19	7	11	19	30	37	19	48	38	51	51	3	6	58	153	61	71	9			361

DIPHTHERIA
(In Rural Municipalities)

POST OFFICE	SEX		MONTH OF FEBRUARY, 1913												AGE								
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	TOTAL
Claresholm	2	2					2	2									4						4
Didsbury	1	1							1	1						1	1						2
Gleichen	1						1											1					1
High River	3	5						1		1		1	3	2		2	2	2	2				8
Innisfail	2	1				3											1	1	1				3
Medicine Hat	3	2						3		2						3	1		1				5
Okotoks	1	1	2												1				1				2
Pakan	56	25		8	5				19	38	10			1	7	13	55	5	1				81
Pincher Creek	1									1							1						1
Sedgewick		1					1											1					1
Stettler		1									1							1					1
Stony Plain	2	1											3					2	1				3
Strathcona	1				1												1						1
Sturgeon	2	2			4											1	3						4
Vegreville	18	16			1	4	11		1		2	11	4		1	5	23	2	3				34
Victoria	1	3	1						2				1			1	1	1	1				4
Wetaskiwin	2				2											1	1						2
Totals	96	61	3	8	13	7	15	6	23	43	13	12	11	3	9	27	96	15	10	....	....	....	157

SMALLPOX
(Within Municipalities)

POST OFFICE	SEX		MONTH OF FEBRUARY, 1913												AGE								
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	TOTAL
Athabasca Landing	....	1	...	...	...	...	...	...	...	1	...	...	...	...	....	....	1	....	....	....	....	....	1
Bassano	1	1	...	1	...	1	...	...	...	...	...	...	...	...	....	....	....	2	....	....	....	....	2
Calgary	23	4	2	1	6	8	9	1	...	...	...	...	...	...	....	2	2	7	15	1	....	....	27
Castor	1	....	...	...	...	...	1	...	...	...	...	...	...	...	....	....	....	....	1	....	....	....	1
Edmonton	32	15	...	9	23	9	3	1	...	...	2	...	...	...	....	5	6	11	21	4	....	....	47
Ft. Saskatchewan	1	....	...	1	...	...	...	...	...	...	...	...	...	...	....	....	....	....	....	1	....	....	1
Gadsbury	1	....	...	...	...	...	...	...	...	...	1	...	...	...	....	....	....	....	1	....	....	....	1
Grand Prairie	2	....	...	...	2	...	...	...	...	...	...	...	...	...	....	....	....	1	1	....	....	....	2
Kimball	1	....	...	1	...	...	...	...	...	...	...	...	...	...	....	....	....	....	1	....	....	....	1
Lethbridge	9	....	...	...	3	6	...	...	...	...	...	...	...	...	....	....	....	4	5	....	....	....	9
Medicine Hat	3	....	...	...	...	...	...	...	...	...	...	...	...	3	....	....	....	....	3	....	....	....	3
St. Albert	3	....	...	...	...	1	...	...	2	...	...	...	...	...	....	....	....	....	3	....	....	....	3
Totals	77	21	2	13	34	25	13	2	2	1	3	...	...	3	....	7	9	25	51	6	....	....	98

SMALLPOX

(In Rural Municipalities)

POST OFFICE	SEX		MONTH OF FEBRUARY, 1913												AGE								
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0–1	1–4	5–14	15–24	25–41	45–59	60–69	70–OVER	TOTAL
Cardston	5		2				3										1	1	3				5
Didsbury	1					1													1				1
Gleichen	2	1	2					1										1	1	1			3
High River	1	2	3														1		1	1			3
Lac Ste. Anne	2					1	1											1	1				2
Lethbridge	6	1			1	2	3	1							1			2	4				7
Macleod	3	3	3											3		1	1	2	1	1			6
Okotoks	1						1												1				1
Pakan	5	4				9									1	1	1	3	1	2			9
St. Albert	1								1											1			1
Stettler	6	1			2	3	2										1	3	1	2			7
Sturgeon	1			1															1				1
Totals	34	12	10	1	3	16	10	2	1					3	2	2	5	13	16	8			46

CHICKENPOX
(Within Municipalities)

POST OFFICE	SEX		MONTH OF FEBRUARY, 1913												AGE								
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	TOTAL
Calgary	38	28	24	3	4	5	4	2	2	1	6	3	8	4	5	7	48	5	1				66
Edmonton	56	61	8	41	12	1	4	20	4		5		5	17	10	22	79	3	3				117
High River	1	1				1	1								1		1						2
Lacombe	4	3												7		3	3	1					7
Lethbridge	3	2	1				2	1			1				1		4						5
Macleod		1		1												1							1
Medicine Hat		1	1													1							1
Nanton		1							1								1						1
Vermilion	1				1										1								1
Wetaskiwin	2	2						4								1	3						4
Totals	105	100	34	45	17	7	11	27	7	1	12	3	13	28	18	35	139	9	4				205

(In Rural Municipalities)

POST OFFICE	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	TOTAL
Alexandra		1		1													1						1
Carstairs	2				1	1									1			1					2
Lacombe	1				1										1								1
Leduc	1	4			5												5						5
Macleod	1		1													1							1
Medicine Hat	1					1										1							1
Pincher Creek		2								1				1			2						2
St. Albert	1	4				2						3					3	1	1				5
Sturgeon		2	2													1	1						2
Wetaskiwin	10	7		16				1								4	13						17
Totals	17	20	3	17	7	4		1		1		3		1	2	7	25	2	1				37

WHOOPING COUGH
(Within Municipalities)

POST OFFICE	SEX		MONTH OF FEBRUARY, 1913												AGE								
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	TOTAL
Calgary	16	22	2	1	...	2	1	3	2	2	4	7	5	9	5	12	20	1	...	...	...	...	38
Carlstadt	1	1	...	...	...	...	...	...	2	...	...	...	...	...	2	...	...	...	...	...	...	...	2
Edmonton	8	8	...	...	3	...	3	...	1	...	6	...	...	3	...	5	11	...	...	...	...	...	16
Innisfail	15	6	...	...	...	...	...	...	...	...	21	...	...	...	1	9	11	...	...	...	...	...	21
Taber	5	2	...	...	...	...	...	...	...	...	4	3	...	...	1	2	4	...	...	...	...	...	7
Ft. Saskatchewan	3	1	4	...	...	...	...	...	...	...	...	...	...	...	...	1	3	...	...	...	...	...	4
Totals	48	40	6	1	3	2	4	3	5	2	35	10	5	12	9	29	49	1	...	...	...	...	88

(In Rural Municipalities)

POST OFFICE	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	TOTAL
High River	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Leduc	1	1	...	...	...	...	...	...	...	...	...	...	...	2	1	...	...	1	...	...	...	...	2
Totals	1	2	...	...	...	...	1	...	...	...	...	...	...	2	1	1	...	1	...	...	...	...	3

TUBERCULOSIS
(Within Municipaities)

POST OFFICE	SEX		MONTH OF FEBRUARY, 1913												AGE								
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	TOTAL
Calgary	9	4				1	1	1	2	4	1			3		1		2	10				13
Carstairs		1				1													1				1
Didsbury	1						1											1					1
Edmonton	9	4					3	3	2		1	2		2				3	8	2			13
Lacombe	2	1												3					3				3
Macleod	1	1		2														2					2
Stony Plain		1												1					1				1
Vegreville		1											1						1				1
Totals	22	13		2		2	5	4	4	4	2	2	1	9		1		8	24	2			35

(In Rural Municipalities)

POST OFFICE	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	TOTAL
Didsbury	1	1									1		1					1	1				2
Sturgeon	1								1										1				1
Totals	2	1							1		1		1					1	2				3

MUMPS
(Within Municipalities)

POST OFFICE	SEX		MONTH OF FEBRUARY, 1913												AGE								
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	TOTAL
Calgary	15	10	2	3	2	5	2	1	2	...	1	4	2	1	...	3	4	7	11	...	...	...	25
Edmonton	2	...	...	...	1	...	...	1	...	...	...	...	...	...	...	1	...	...	1	...	...	...	2
Edson	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
High River	4	2	1	...	...	...	2	...	...	3	...	...	...	...	...	...	2	2	2	...	...	...	6
Innisfail	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
Nanton	2	2	...	...	...	4	...	...	...	...	...	...	...	...	...	2	2	...	...	...	...	...	4
Taber	2	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	1	1	...	...	...	...	2
Totals	26	15	3	4	3	10	5	2	2	3	1	5	2	1	...	6	9	12	14	...	...	...	41

(In Rural Municipalities)

POST OFFICE	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	TOTAL
Leduc	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Medicine Hat	2	2	1	...	1	2	...	...	...	...	...	...	...	...	...	...	2	1	1	...	...	...	4
Sturgeon	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Vegreville	...	1	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	1
Totals	4	3	1	..	1	2	1	1	...	...	...	1	...	...	1	...	2	1	3	...	...	...	7

OTHER DISEASES
(Within Municipalities)

POST OFFICE	SEX		MONTH OF FEBRUARY, 1913												AGE								
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DE	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	TOTAL
Calgary	11	7	1	1	...	7	1	1	1	1	...	2	1	2	...	3	...	2	11	2	...	...	18
Didsbury	2	1	...	...	...	...	...	...	3	...	...	...	...	...	...	...	2	...	1	...	...	...	3
Edmonton	36	10	2	...	4	9	8	6	3	...	4	...	5	5	...	...	1	7	24	13	1	...	46
Edson	4	...	...	...	...	3	...	...	1	...	...	...	...	...	...	...	...	2	2	...	...	...	4
Innisfail	2	1	...	...	2	...	1	...	...	...	...	...	...	...	1	1	...	...	1	...	...	...	3
Lethbridge	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
Macleod	4	1	...	3	...	2	...	...	...	...	...	...	...	...	...	1	...	1	3	...	...	...	5
St. Albert	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Taber	1	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	1
Vegreville	2	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	1	1	...	...	...	2
Vermilion	2	1	...	...	...	...	...	...	3	...	...	...	...	...	...	2	1	...	...	...	...	...	3
Totals	65	22	4	4	7	21	10	7	11	1	4	3	8	7	2	7	5	14	43	15	1	...	87

(In Rural Municipalities)

POST OFFICE	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DE	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	TOTAL
Innisfail	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Macloed	3	1	2	1	...	...	...	...	...	...	...	...	...	1	...	1	...	1	1	1	...	...	4
Medicine Hat	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	1
Red Deer	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	1
Sturgeon	2	1	...	...	...	2	...	...	...	1	...	...	...	...	...	...	...	...	3	...	...	...	3
Totals	7	3	2	2	...	2	...	...	...	1	...	...	1	2	...	2	...	2	5	1	...	...	10

TOTAL NUMBER OF INFECTIOUS AND CONTAGIOUS DISEASES WITHIN AND WITHOUT MUNICIPALITIES, REPORTED DURING 1913

POST OFFICE	SEX		MONTH OF FEBRUARY, 1913												AGE								TOTAL
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	
Typhoid Fever—																							
Within Municipalities	473	184	5	30	27	19	6	17	55	155	162	125	39	17	1	20	91	229	274	33	7	2	657
In Rural Districts	119	23	4	11	10	5	1	3	18	32	23	28	5	2	....	2	21	57	55	6	1	....	142
Unorganized Districts	39	.....	2	3	...	3	...	...	3	7	7	9	5	...	....	....	....	16	23	....	....	....	39
Outside Province	25	3	...	1	...	2	...	...	1	11	8	4	1	...	....	....	1	11	16	....	....	....	28
Total	656	210	11	45	37	29	7	20	77	205	200	166	50	19	1	22	113	313	368	39	8	2	866
Smallpox—																							
Within Municipalities	77	21	2	13	34	25	13	2	2	1	3	...	...	3	....	7	9	25	51	6	....	....	98
In Rural Districts	34	12	10	1	3	16	10	2	1	...	...	...	...	3	2	2	5	13	16	8	....	....	46
Outside Province	2	.....	...	1	...	1	...	...	...	...	...	...	...	...	....	....	....	....	2	....	....	....	2
Total	113	33	12	15	37	42	23	4	3	1	3	...	...	6	2	9	14	38	69	14	....	....	146
Diphtheria—																							
Within Municipalities	197	164	19	7	11	19	30	37	19	48	38	51	51	31	6	58	153	64	71	9	....	....	361
In Rural Districts	96	61	3	8	13	7	15	6	23	43	13	12	11	3	9	27	96	15	10	....	....	....	157
Outside Province	.....	1	...	...	...	...	...	...	...	...	...	1	...	...	....	....	....	....	1	....	....	....	1
Total	293	126	22	15	24	26	45	43	42	91	51	64	62	34	15	85	249	79	82	9	....	....	519
Scarlet Fever—																							
Within Municipalities	328	306	29	64	99	111	95	89	40	15	15	22	30	25	7	125	334	87	77	2	2	....	634
In Rural Districts	92	81	5	11	6	23	43	15	7	16	13	8	21	5	7	27	97	29	12	1	....	....	173
Total	420	387	34	75	105	134	138	104	47	31	28	30	51	30	14	152	431	116	89	3	2	....	807
Measles—																							
Within Municipalities	1053	897	258	578	301	195	140	130	112	56	28	24	30	98	110	375	1131	224	107	3	....	....	1950
In Rural Districts	90	55	3	21	37	27	11	12	21	...	6	2	...	5	10	24	71	27	12	....	....	1	145
Total	1143	952	261	599	338	222	151	142	133	56	34	26	30	103	120	399	1202	251	119	3	....	1	2,095
Mumps—																							
Within Municipalities	26	15	3	4	3	10	5	2	2	3	1	5	2	1	....	6	9	12	14	....	....	....	41
In Rural Districts	4	3	1	...	1	2	1	1	...	...	...	1	...	...	1	....	2	1	3	....	....	....	7
Total	30	18	4	4	4	12	6	3	2	3	1	6	2	1	1	6	11	13	17	....	....	....	48

TOTAL NUMBER OF INFECTIOUS AND CONTAGIOUS DISEASES WITHIN AND WITHOUT MUNICIPALITIES, REPORTED DURING 1913

POST OFFICE	SEX		MONTH OF FEBRUARY, 1913												AGE								
	M.	F.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	0–1	1–4	5–14	15–24	25–44	45–59	60–69	70–OVER	TOTAL
Chickenpox—																							
Within Municipalities	105	100	34	45	17	7	11	27	7	1	12	3	13	28	18	35	139	9	4	....	....	....	205
In Rural Districts	17	20	3	17	7	4	...	1	...	1	...	3	...	1	2	7	25	2	1	....	....	....	37
Total	122	120	37	62	24	11	11	28	7	2	12	6	13	29	20	42	164	11	5	....	....	....	242
Whooping Cough—																							
Within Municipalities	48	40	6	1	3	2	4	3	5	2	35	10	5	12	9	29	49	1	....	....	....	....	88
In Rural Districts	1	2	...	...	...	...	1	...	...	...	...	...	...	2	1	1	....	1	....	....	....	....	3
Total	49	42	6	1	3	2	5	3	5	2	35	10	5	14	10	30	49	2	....	....	....	....	91
Tuberculosis—																							
Within Municipalities	22	13	...	2	...	2	5	4	4	4	2	2	1	9	....	1	....	8	24	2	....	....	35
In Rural Districts	1	2	...	...	...	...	...	...	1	...	1	...	1	...	....	....	....	1	2	....	....	....	3
Total	23	15	...	2	...	2	5	4	5	4	3	2	2	9	....	1	....	9	26	2	....	....	38
Other Diseases—																							
Within Municipalities	65	22	4	4	7	21	10	7	11	1	4	3	8	7	2	7	5	14	43	15	1	....	87
In Rural Districts	7	3	2	2	...	2	...	...	...	1	...	...	1	2	....	2	....	2	5	1	....	....	10
Total	72	25	6	6	7	23	10	7	11	2	4	3	9	9	2	9	5	16	48	16	1	....	97

Typhoid Fever.—There were 866 cases reported, as compared with 655 for the year 1911. In the cities of Edmonton and Calgary there were 511 cases. Not all of these originated in these cities, but owing to this fact that they are the centres of railway construction and have large hospital accommodation, a great many cases from the country districts are sent in.

In many cases, it was impossible to trace the source of infection. Repeated water examination made by the provincial laboratory went to show that the water supply was comparatively pure. Fly infection and personal contact are in my opinion responsible for a large number of cases.

The medical inspectors made frequent visits to the different towns and camps, urging the disinfection and screening of privies, screening of kitchens and a general cleaning up.

Smallpox.—146 cases as compared with 81 last year. Fortunately, the type was very mild.

Diphtheria.—The advisability of supplying physicians, especially in the outlying districts, with anti-toxin has been considered. Great difficulty has been encountered in persuading some families, especially foreigners, to have protective doses given the children exposed, on account of the cost. This disease is practically endemic in some foreign settlements.

Measles.—There was a large increase in the number of cases of this disease, the majority coming from the city of Edmonton. Owing to the strict school regulations, under which a certificate from the medical officer of health is required for each child absent from school, few cases escape detection.

During the year, 37 permits for the disinterment and removal of corpses have been issued.

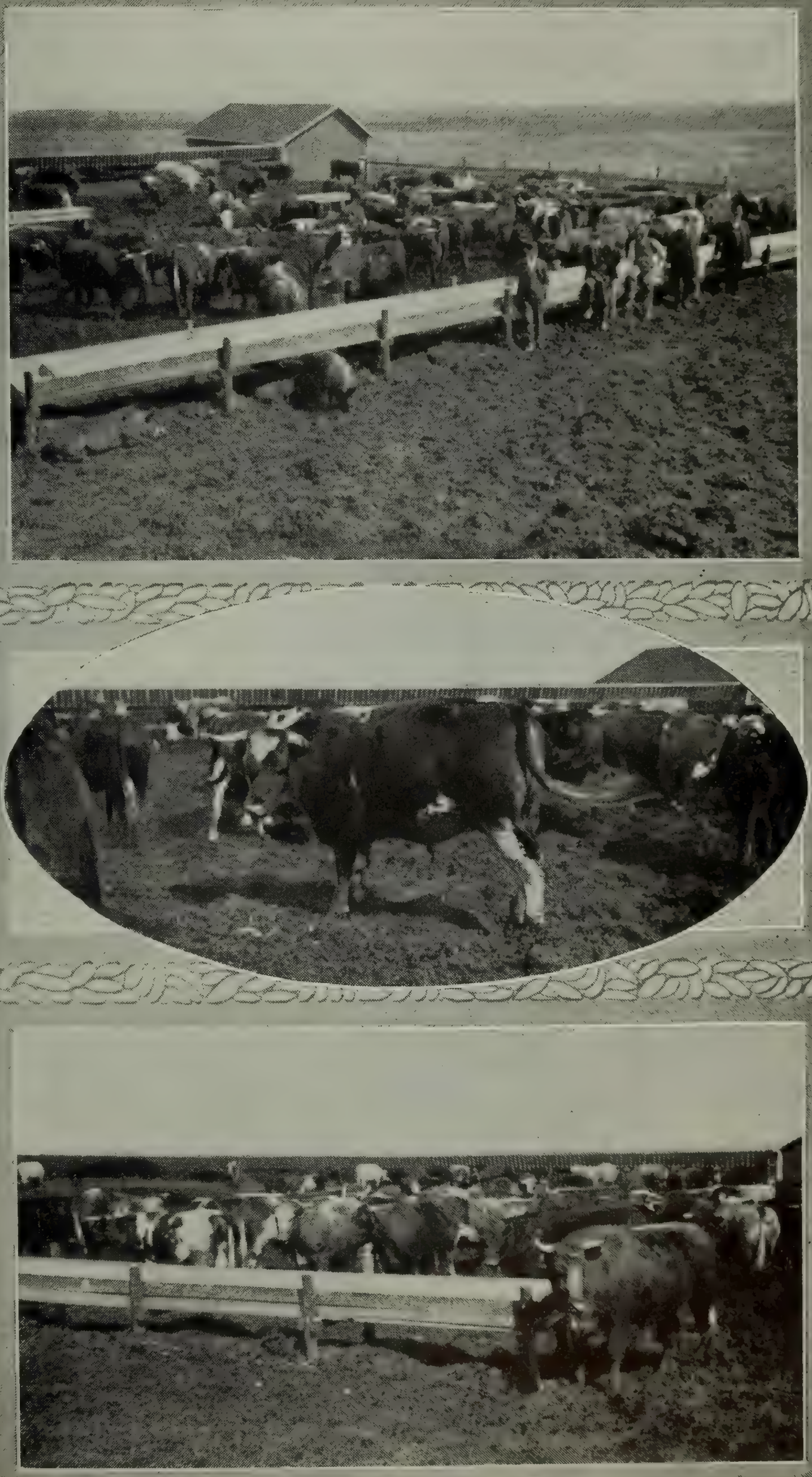
During the year, there was expended $9,249.61 in the relief of cases of poverty and destitution. 192 applications were received and considered.

The following is a list of places:

Coronation (4).
Burdette (1).
Alsask, Sask., (2).
Vulcan (2).
Acme (1).
Elk Point (4).
Edmonton (71).
Innisfree (1).
Cereal (1).
Tide Lake (2).
Staffordville (2).
Plain Lake (1).
Calgary (3).
Stettler (3).
Ponoka (3).
Markerville (1).
Lloydminster (1).
Medicine Hat (2).
Lethbridge (3).
Bonny Glen (3).
Edson (7).
Aldersyde (1).
Gadsby (1).
Passburly (1).
Dinton (1).
Red Deer (1).

Hardisty (1).
Airdrie (1).
Claresholm (2).
Daysland (2).
Clyde (1).
Irvine (2).
Puffer (1).
Edbury (1).
Banff (2).
Athabasca Landing (1).
St. Paul des Metis (2).
Fort Saskatchewan (2).
Trochu (1).
Leduc (4).
Canmore (1).
Rimby (1).
Cummings (2).
Alix (1).
Wetaskiwin (4).
Steveville (2).
Tofield (1).
High River (1).
Sedgewick (1).
Evarts (1).
Red Lodge (1).

Lac Ste. Anne (1).
Junkens (2).
St. Albert (1).
Sundial (1).
Cluny (1).
Morinville (1).
Blackie (1).
Stavely (1).
Gleichen (3).
Innisfail (1).
Brant (1).
Entwistle (2).
Wildhorse (1).
Viking (1).
Onion Lake (1).
Garden Plains (1).
Hartshorn (1).
Suffield (1).
Bickerdike (1).
Mannville (2).
Carlstadt (1).
Wolf Creek (1).
Pakan (1).
Castor (1).
Swallowhurst (1).



No. 7.—Steer Feeding at Demonstration Farm, Olds.

47 paupers were buried during the year, at the expense of the province. There are, at present, 9 destitutes maintained by the government in the Lacombe Home at Midnapore, and one in Youville Convent, St. Albert.

Incurables.—During the year, there was expended $5,940.00 in the care and maintenance of incurables. There are at present:

8 cases in Medicine Hat Hospital.

4 cases in Providence General Hospital, Daysland.

2 cases in Lacombe Home, Midnapore, maintained at the expense of the government.

The report of Dr. Norman is as follows:

EDMONTON, ALTA., February 1, 1913.

Dr. W. C. Laidlaw,
Provincial Medical Officer of Health.

SIR,—I beg to submit my second annual report, for the year 1912.

Infectious diseases have had their usual annual crops, but in most instances active measures have controlled and confined the outbreaks to their localities in which they have originated.

Smallpox.—In the early months of the year, considerable smallpox developed, but rigid quarantine and vaccination confined it to distinct areas so that it did not spread much beyond these. The type of the disease was for the most part mild, and this accounts in many cases for its not being attended to in the early stages. Some cases however were quite severe, and several months past to date, the province has been practically free of this loathsome disease.

Scarlet Fever.—Of this disease, there have been quite a number of cases, scattered pretty universally over the province. Most cases have been mild, but an outbreak near Brant and one near Diamond City, proved to be of a particularly violent type and with quite a number of deaths.

Typhoid Fever.—In some cases, this disease became quite prevalent, notably in Edmonton, Calgary and along some of the lines of construction work, and in some cases at least, fly infection plus infected water was no doubt the cause. This is one of the diseases that in the future will undoubtedly be controlled as we get pure water and get rid of the flies. At present, the cases of typhoid are few.

Diphtheria.—This is still with us but thanks to anti-toxin, its terrors and fatality has decreased. The cases have not been as numerous as some years, but quite a number of fatal cases have been reported, especially among the Russians, who are very lax in obtaining medical attention until too late, and the disease spreads here, owing to their "fatalistic" beliefs, and so not observing strict quarantine. At the same time, it is difficult to convict them of breaking quarantine.

Measles.—A large and widespread epidemic of this disease occurred in the Leduc district, and some of the cities too, had quite a number of cases, but generally speaking in the country districts the disease was more sporadic.

German Measles, Whooping Cough and *Chickenpox* do not seem to have been as prevalent as usual.

Infantile Paralysis shows considerable decrease from last year.

Rabies developed north of Lloydminster, and one woman was bitten by a dog, and later she was sent to the Pasteur Institute for treatment.

The places visited by me, dates, and for what reason are herewith appended:

Smallpox.

Gleichen	Jan. 8 and 9 and April 20, 1912.
Bassano	Jan. 12, 13, 25 and 26.
High River	January 3.
Magrath	Jan. 4, 5, 6, 21, 22, Feb. 7, 8 and June 13 and 14.
Elbow & Springbank district	Jan. 14, 20, 27, Feb. 5, 6, 11, 17, 23, and March 6.
Lethbridge	May 12.
Bickerdike	May 28 and 29.
Hinton	May 30.
S. E. of Strathcona	June 4, 10, 11, 18 and 24.
Castor	June 17.
Pellican Portage	September 23 to October 3.
Calling River	August 28 to September 5.
Macleod district	December 5 and 6.
Lacombe district	December 13.

Scarlet Fever.

Banff	January 26.
Stony Plain district	June 30.
Claresholm	February 18 and 19.
High River district	May 11.
Summerview	June 13.
Carlstadt district	July 2, 7, 8.
Lacombe district	October 21.
Brant	November 23.

Typhoid Fever.

Gleichen district	September 11, November 7.
Bassano district	September 12, November 8.
Brooks district	November 9.
Suffield	September 13, 14.
N. Red Deer	September 18.
G. T. P and C. N. R., west	October 26, 27, 28, 29, 30.
G. T. P. (Brazian branch)	November 2, 3, 4, 5.

Measles.

Leduc district	Mar. 1, 2, 18, 19, 20, 21, 25, 26, 27, 28, 29, 30, Apr. 2, 3, 4. 6, 9, 10 15, 16, May 6, 7, 8, 14, 15, 16, 17, 22, 23, 24, 25 and June 7.
Mannville	March 3, 4.
Nevis	January 15.

Hydrophobia Suspect.

Lloydminster	May 20, 21.

Diphtheria

N. E. of Edmonton	February 13.
S. E. of Edmonton	March 9.
Namao	March 11 and 13.
Highland Park	March 12.
Pakan	March 23 and August 14.
Coronation school district	March 23.
Chipman	August 16.

Hospitals Visited.

Castor	February 15.
Medicine Hat	April 22.
Holy Cross, Calgary	April 25.
General, Calgary	April 25.
Macleod	April 26.
Pincher Creek	April 27.
Isolation, Calgary	April 29.
Salvation Army, Calgary	April 29.
Lacombe	May 2.
Castor	June 16.
Lacombe	August 1.
Alexandra, Edmonton	August 5.
Provost	August 6.
Daysland	August 7.
Bawlf	August 8.
Camrose	August 9.
Pakan	August 15.
Vegreville, General	August 19.
Roland M. Boswell, Vegreville	August 19.
Edmonton Isolation	August 26.
Strathcona	October 9.

Nuisances were investigated at the following places: S. E. of Edmonton, Morinville, Rosslyn, Leduc, Ellerslie, Wetaskiwin, Lacombe, N. Red Deer, Meeyanoh (north of Edmonton).

In connection with sanitation, I made visits to the following places:

Coleman	Log camps	January 15, 16.
Bellevue	Dairy	February 20.
Frank	Lille mine	February 20.
Bassano	Oscar mine and dead animals	February 22.
Wainwright	Cesspool	February 27.
Bankhead	Camp	March 7.
Strathmore	Cesspool	March 19.
Gadsby	Garbage	May 2.
S. E. of Strathcona	Slaughter house	June 4.
St. Albert	River	June 5.
Rocky Mountain House	General	June 21.
Coleman	"	June 27, July 10, Nov. 19.
Blairmore	"	June 28, July 10, Nov. 20.
Frank	"	July 11, Nov. 21.
Hillcrest	"	July 11, Nov. 22.
Carstairs	Pond polition	September 16.
Clover Bar Mine	Pond polition	October 11.
Aldersyde	Boarding house	November 11.
Edmonton, Dunvegan R. R.	General	November 15, 16.
Cardiff	"	November 17.
Banff	Re Bow River	December 2.
Canmore	Re Bow River	December 3.
Namao	Steel gang bunk house	December 10.

I also investigated several cases of destitution, quite a few being in Edmonton, and I also visited Canmore, Claresholm and Edson, in connection with destitution, and in most instances found the people needing aid, and deserving same.

Trusting that this report may be satisfactory, I am,

Your obedient servant,
T. L. NORMAN,
Provincial Medical Inspector of Health.

HOSPITALS.

The following hospitals are in receipt of the government grant of 25 cents per patient per day:

HOSPITAL.	LOCATION.	No. of Patients	No. of Days Tr'tm'nt
Macleod General	Macleod	282	3,851
Medicine Hat	Medicine Hat		
Memorial	Pincher Creek	298	3,228
Memorial	Red Deer	373	6,877
Royal Alexandra	Edmonton	1,254	22,506
Edmonton General	”	1,468	25,986
Misericordia	”	1,458	30,926
Isolation	”	448	7,444
Strathcona General	”	451	4,564
Beulah Mission	”	40	873
Galt General	Calgary	1,104	23,153
Holy Cross	”	3,155	45,577
Calgary General	”	4,090	59,430
Salvation Army	”	105	9,844
Isolation	”	400	9,535
Tubercular	”		
Lacombe General	Lacombe	119	2,099
Roland M. Boswell	Vegreville		
Vegreville General	”	341	5,783
George McDougall	Pakan	371	1,090
Scandinavian	Wetaskiwin	182	2,644
Bawlf Public	Bawlf	288	3,440
Providence General	Daysland	230	3,606
Camrose Municipal	Camrose	138	1,931
St. Joseph's	Grouard	109	1,503
High River General	High River		
St. Mary's	Trochu	85	1,196
Our Lady of the Rosary	Castor	147	2,405
York General	Provost	95	1,361
Sacred Heart	Athabasca Landing	137	2,306
Lady Minto	Islay	48	196
Lamont Public	Lamont	94	1,242

I have the honour to be, Sir,

Your obedient servant,
W. C. LAIDLAW, M. D.,
Provincial Medical Officer of Health.

10.—*REPORT OF THE PROVINCIAL SANITARY ENGINEER*

SIR,—I have the honour to submit the following report on the work of the sanitary engineering branch for the year 1912.

During the year plans and specifications were submitted to and examined by the writer, and the provincial board of health advised to issue certificates to the following cities, towns, etc., in connection with their various works which are as follows:

WATERWORKS.

New Works.—Bassano, Coleman, Vegreville, Medicine Hat, Athabasca Landing.

Extensions.—Edmonton, Calgary (service mains), Calgary (gravity system), Gleichen, Red Deer.

Water Purification.—Edmonton, Calgary.

SEWERAGE.

New Works.—Calgary (storm water), Bassano, Vegreville.

Extensions.—Calgary, Edmonton, Gleichen, Red Deer, Medicine Hat, Wetaskiwin, Lethbridge.

SEWAGE DISPOSAL.

New Works.—Bassano, Vegreville, Macleod.

The reports of the various engineers representing the cities and towns of the province, showing fully the progress now being made in the installation of waterworks, sewerage works, etc., throughout the province, have been omitted this year.

Consultations with many of the various engineers and other officials in charge of the foregoing works in connection with their installation, etc., were held and also with regard to projected works for which certificates have not yet been issued.

Matters in connection with the sanitary engineering requirements of the various government institutions throughout the province have had the attention they required.

Respectfully submitted,

R. B. OWENS,
Provincial Sanitary Engineer.

11.—*REPORT OF THE DIRECTOR OF THE PROVINCIAL LABORATORY*

SIR,—I have the honour to submit the following report of the work of the provincial laboratory for the year 1912.

The provincial laboratory carries out most of the technical work for the government in several lines, viz., public health, medico-legal, diseases of animals, liquor analysis and miscellaneous examinations.

I.—PUBLIC HEALTH.

Public health investigations relate to the diagnosis of some communicable diseases, the examination of water supplies and analysis of foods including milk.

During 1912 examinations were made for the diagnosis of diphtheria, typhoid fever and pulmonary tuberculosis as shown in the following table:

SPECIMENS EXAMINED FOR DIAGNOSIS OF INFECTIOUS AND CONTAGIOUS DISEASES.

DISEASE	No. of Specimens	RESULT		Specimens sent from No. of		NUMBER RECEIVED EACH MONTH		
		Neg.	Pos.	Phy'ns	P.O.	Typhoid Fever	Diphtheria	Sputum
Typhoid Fever	141	123	18	93	68	Jan.....12	21	20
						Feb.....8	15	22
						Mar.....8	23	24
						April.....8	17	30
						May.....11	36	29
Diphtheria...	646	491	145	236	102	June.....9	25	29
						July.....6	33	28
						Aug.....16	42	13
						Sept.... 28	121	13
						Oct......23	78	25
Pulmonary Tuberculosis..	278	216	62	220	158	Nov.....8	160	22
						Dec...... 4	75	23
Total.........	1065	830	225	549	328	141	646	278

Visits were made to the asylum at Ponoka for the insane and samples of sewage water taken for examination with reference to the operation of the beds for the treatment of the sewage from the asylum and the effects on the water of the Battle River.

I also attended the dairy school held at Red Deer and gave lectures and demonstrations in bacteriology.

The quality of water from various supplies was examined by analysis of 164 samples. Some of these had regard to the fitness of the water for use in public waterworks; others were for private use.

Analysis of 23 samples of milk were made. Such examinations of milk by means of samples have regard chiefly to the *adulteration* and butter-fat content of same. The more important matter of *sanitary quality* may be partly judged by the amount of dirt in the milk and by bacterial examination of fresh samples. Improvement in the sanitary quality of milk and maintenance of a high standard of such can be most surely secured by a good system of dairy-and-milk-inspection.

Other foods were examined as follows: Butter 1; ice cream 1; meat 3; raspberries 1; cheese 3; candy 2.

II.—ANIMAL DISEASES.

Among diseases of animals *rabies* is one of those of chief importance in public health laboratory examinations, owing to the danger which it offers to the lives of human beings. Fortunately this province has had, as yet, remarkably few cases of rabies. An outbreak near Lloydminster caused the death of a number of cattle, dogs, sheep and pigs, and necessitated the Pasteur treatment being given to one person who was bitten. Examinations made in this laboratory left no doubt of the nature of the disease.

In the instance of a suspected case at Athabasca Landing the examination of the dog's brain proved negative.

III.—MEDICO-LEGAL INVESTIGATIONS.

Medico-legal investigations have been carried on in assisting the department of the Attorney General in the administration of the criminal law. Postmortem examinations, analysis of materials suspected to contain poison, of blood stains, etc., have been made when necessary or advisable and the results submitted in the law courts in those instances that came to trial. The certainty of detection and punishment of crime is one of the best preventives of criminal acts. The more thoroughly any crime is investigated the less likelihood there is of innocent persons being wrongfully accused or punished. As laboratory investigations are of prime value in detecting some forms of crime this part of the work of the provincial laboratory receives very careful attention and much time is devoted to it. In 1912 there were 46 such investigations.

IV.—LIQUOR EXAMINATIONS.

Analyses were made of 38 samples of liquors for the license branch of the department of the Attorney General.

The amount of work and time taken in the technical work necessary for many of the investigations and examinations included in the foregoing is very considerable and can be fully appreciated only by those who are somewhat familiar by actual experience with the work itself.

I have the honour to be, Sir,
Your obedient servant,
D. G. REVELL,
Director.

12.—*REPORT OF THE PUBLICITY BUREAU*

SIR,—

I have the honour to submit herewith a report of the operations of this bureau for the year 1912.

During the past year we have undoubtedly received more settlers into our province than during any previous year. The practical efforts and expenditures of past years have greatly supplemented our work during the current year, and warrant the prediction that we shall continue to receive an increased immigration for years to come. Our past experience also reveals the certainty of quick and profitable results for all efforts and expenditures in advertising the unrivalled resources and opportunities of our great province.

In 1901 the population was 65,000; in 1906 it was 185,000. The census of 1911 gave a population of 385,000. To-day the population is very near the half million mark. If the same rate of increase continues for the next five years (and we believe it will) the population of the province will have reached nearly a million.

Reports received from the Dominion land agents in our province show that not less than 15,000 homestead entries were made during the current year, and as statistics show that each entry for the previous year averaged 3.10 persons per entry, we have on this basis increased our population upon the land alone by about 50,000 souls who will occupy not less than 2,500,000 acres of our soil. A conservative estimate of the increased population in our four cities during the current year has been placed at 25,000, although a much larger number is claimed by many.

The following towns report large increases during the past year, viz,—Bassano, Red Deer, Vermilion, Athabasca Landing and Edson; these with the 8000 men employed upon railway construction and the 8000 odd imported from Ontario and the eastern provinces for extra harvest help, places the actual immigration figures for the past year at about 90,000 souls, an increase of 24%.

The total Canadian immigration as reported by the Dominion government for the past year has been placed at 394,984, of which we received in round numbers 50,000 as follows:

British	13,000
American	30,000
Five other countries	7,000

or a little more than 12% of the total immigration to Canada, which gives us for the first time in excess of a proportionate number.

The high character of our immigration is being well maintained. The wealth per capita for the thirty thousand American settlers received this year has been placed at $1,300.00, total value of effects and cash $3,900,000.

The British settlers show that from year to year a larger percentage of farmers are coming to us than heretofore, with more means and experience for agricultural pursuits.

Four special train loads of settlers personally conducted by our commissioners at Montreal and Toronto were secured in April from

Ontario and the eastern provinces before closing our offices at Toronto and Montreal on June 1st.

WINNIPEG.

Our office at Winnipeg has been maintained with full force throughout the year. Its activities continue to supplement our population daily, and has become almost indispensable in securing harvesters and labourers, and performing other special duties which we are obliged to meet from time to time.

A special train of prominent Iowa farmers and business men were organized by our commissioner at Winnipeg, and personally conducted into our province during the month of August, and also a large number of smaller parties from time to time throughout the year. The unprecedented demand for harvest help found us well organized and able to reticket at Winnipeg over eight thousand farm labourers for Alberta during the past harvest season.

THE INTERNATIONAL DRY-FARMING CONGRESS.

Having last year secured the seventh annual meeting of the world's greatest agricultural congress to meet at Lethbridge October 19th to 26th, we provided a world-wide opportunity to advantageously advertise our province during the current year. It would be impossible to estimate the great value and benefits received from this congress by our province.

Never before has the International Dry-Farming Congress been so thoroughly representative as it was this year.

With government representatives not only from all parts of the American continents, but from European countries, and from far away China itself, it is safe to say there has never been anywhere or at any time in the history of the world so thoroughly representative a gathering of agriculturists.

The great variety of valuable premiums offered brought together the largest and best collection of agricultural exhibits ever seen on the continent, representing almost every civilized nation in the world. The offer of a $2500.00 gas tractor engine by the "Rumley Co." for the best bushel of wheat was beyond all question the prize that most appealed to wheat growers throughout the world. It was a great prize and consequently created world-wide interest. Every province in western Canada was bent on capturing this prize in order to establish its place in wheat raising.

The same purpose characterizes the great wheat growing states of the American Union.

The winning of this great prize together with capturing all the chief prizes in grain, some 85 in all with eleven sweepstake premiums, establishes our agricultural pre-eminence as nothing else could do.

A brief summary of the activities in connection with this bureau during the past year will include the publication and distribution of 45,000 books and booklets, and 10,000 maps descriptive of Alberta. Your chief commissioner has travelled 7,600 miles by rail, addressed 23 public meetings in the United States, prepared and published 65 newspaper and magazine articles, received 3,500 and wrote 4,100 letters.

We have met and entertained a large number of prominent and influential newspaper and magazine writers, and a great many home-seekers and business men.

I have the honour to remain,

Your obedient servant,

CHAS. S. HOTCHKISS,

Chief Publicity Commissioner.

PROVINCE	POPULATION 1911	IMMIGRATION 1912	PERCENTAGE
Maritime Provinces (3)	937,949	18,573	1.98
Quebec	2,002,726	63,124	3.15
Ontario	2,523,297	119,088	4.80
Manitoba	455,869	43,685	9.58
Saskatchewan	492,344	45,866	9.32
Alberta	**375,435**	**48,586**	**12.94**
British Columbia	390,229	56,818	14.56
	7,077,649	395,739	5.5

Total immigration 5½% of whole population.

13.—*REPORT OF THE SUPERINTENDENT OF DEMONSTRATION FARMS*

SIR,—I have the honour to submit herewith the annual report in connection with demonstration farms for the year 1912.

PREFACE.

The department has established six demonstration farms at different points in the province, these being located respectively at Medicine Hat, Claresholm, Olds, Sedgewick, Vermilion and Stony Plain. The object in establishing these farms is two-fold. One is to work out in practical demonstration, on a farm conducted as any first-class up-to-date farmer would conduct his own business, the results of the experiments made on the experimental farms operated by the Dominion government in the province. The other purpose is to make these farms the basis of schools of agriculture, three of which are now under erection at Claresholm, Olds and Vermilion. These schools will be carried on in connection with the farms, and in them will be given a full course in practical agriculture, as well as a complete course in domestic science. Graduation from these schools will entitle the student to a diploma in practical agriculture which will admit him to the Provincial Agricultural College, to be established at a later date, where he may spend two years to complete his course and take the degree of Bachelor of Scientific Agriculture. The demonstration farms in connection with these schools will be carried on in such a way that the student attending them will have the advantage of an experience in agriculture upon a commercial basis.

The farms will all be operated on the mixed farming principle—dairying, hog-raising, sheep-raising, poultry farming, as well as the raising of horses, and the feeding of beef cattle will be carried on at the farms. Accurate records will be kept so that not only the students but farmers throughout the province can get first-hand information as to actual results along different lines of agriculture in the province. These farms will naturally become live-stock centres, and the breeding of good live-stock will be carried on at each farm, so that young stock of different breeds and of pure breeding can be offered for sale to farmers at reasonable prices. The keeping of good live stock on these farms will also stimulate the live-stock industry in that locality, and in this way very materially assist the development of agriculture in the province.

The object of this whole system is primarily to bring agricultural education as near as possible to the men on the land. These schools of agriculture, located as they are in different parts of the province, offer an inducement at the very door of the farmer to give his boy some training in scientific agriculture. They supply the link between the man on the land and the larger central agricultural college in the province.

From these schools, short courses in agriculture will be carried on. All the extension work in agricultural education will centre around these schools. The institute meetings, the short course schools, the seed fairs, and the weed inspection can be effectively operated from these schools as centres, and the teachers in charge can also do very effective work during the summer months as district representatives, giving assistance to the farmers throughout the districts.

ANNUAL REPORT.

Alberta is essentially an agricultural province. The basis of its wealth lies in its vast areas of agricultural lands. The problems which confront the people, in so far as the commercial and industrial development of the country are concerned, rest basically upon the development of these vast agricultural areas. That Alberta is a country of tremendous resources is a story which has been often told—but we cannot become too familiar with the facts, for the realization of the immensity of our problems cannot fail to help in their solution. Alberta has a total area of 162,755,200 acres. This is more than equal to the area of Austria-Hungary. It is double the size of Great Britain and Ireland and more than 80,000 square miles larger than New England States. From northern to southern point of the province is a distance of about 800 miles, and from the east to the west it varies from 250 to 300 miles.

Throughout the vast area there is a wide diversity of soil and climate. The problems which agriculture presents in the south may not be presented to the farmer in the north, and even within a comparatively few miles the difference in conditions may be considerable.

The following figures, giving the annual average precipitation in different parts of the province over a period of seven years, give some idea of climatic conditions existing in the province over the period named:

AVERAGE ANNUAL PRECIPITATION FOR SEVEN YEARS.

	Medicine Hat	Didsbury	Edmonton	Calgary
January	.43	.54	.96	.33
February	.31	.43	.55	.28
March	.46	.79	.86	.74
April	.32	.78	.63	.80
May	2.37	3.31	1.74	3.62
June	2.09	5.33	3.97	3.61
July	1.14	2.80	3.00	2.08
August	1.11	3.15	2.21	2.94
September	.50	1.84	1.05	.90
October	.41	.89	1.02	.56
November	.26	.77	.92	.36
December	.42	1.10	.57	.22
	9.82	21.73	17.48	16.44

These points have been selected for comparisons because they represent fairly closely conditions prevailing in the different sections of the province.

Add to the factor of the variable rainfall in different portions of the province the difference in the character of the soil, and some idea can be obtained of the factors necessitating a different treatment of the question of farm demonstration work in the province of Alberta from any other province in the Dominion. Manitoba might establish one farm at Winnipeg and find conditions similar to those prevailing in other parts of the province. Ontario might work out its problems at Guelph, but for Alberta it was deemed necessary to establish a number of farms in different sections of the province, the better to serve the needs of the community.

That the agricultural needs of the province are great—that there is abundant work to be done is shown by the rapid development of the agricultural interests of the province. In 1911 the total grain crop of Alberta consisted of:

GRAINS FOR THE YEAR 1911.

	Crop area in acres.	Total yield in bushels.	Average yield per acre.
Spring Wheat	757,906	15,730,238	20.75
Winter Wheat	182,671	4,336,749	23.74
Oats	669,827	27,604,993	41.21
Barley	103,302	3,037,584	29.41
Flax	16,549	153,908	9.30
Rye	2,190	38,722	17.68
Speltz	203	5,337	26.29
Total	1,732,648	50,907,531	

And the live stock of the province was estimated at the end of 1912 as follows:

Live Stock for 1912.

Horses	557,571	
Swine	536,915	
Sheep	366,946	
Dairy Cows	164,989	944,464
Other Cows	142,243	
Beef Cattle	161,985	
Other Cattle	475,247	
Total	2,405,896	

Roots Crop.

	Acreage	Bushels	Average
Potatoes	42,539	7,459,000	175.35
Turnips	6,740	1,742,306	258.52
Mangolds	869	410,910	447.85

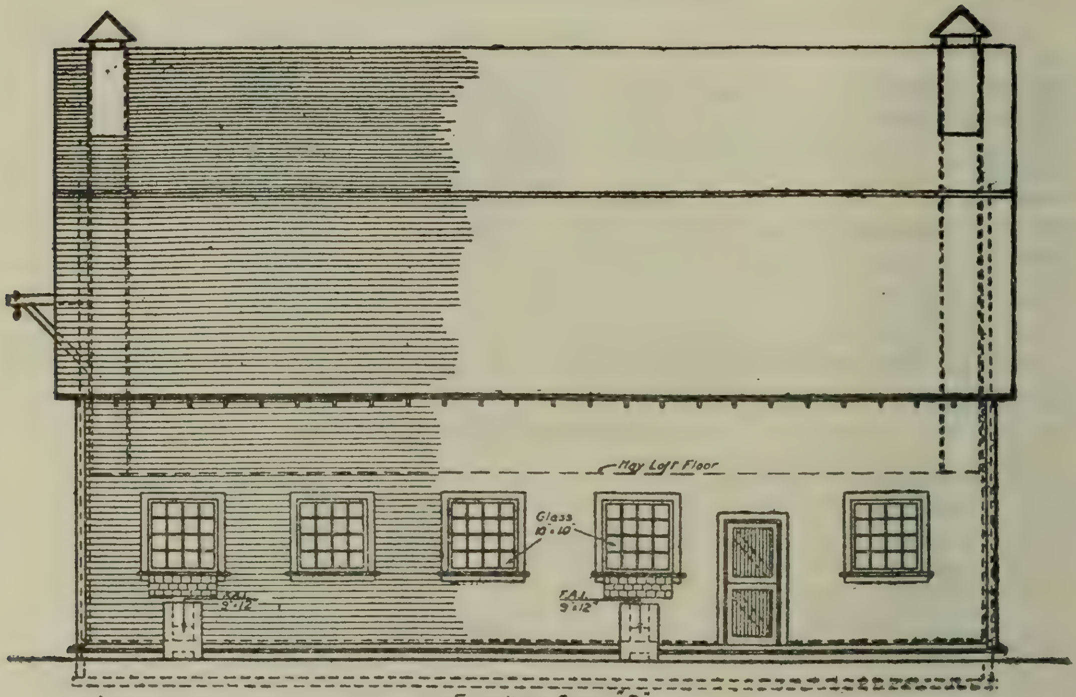
In the season of 1912 the production of live stock in Alberta showed great development. As a wealth-producing factor the live stock industry is increasing year by year.

Cattle Exports for the Year 1912.

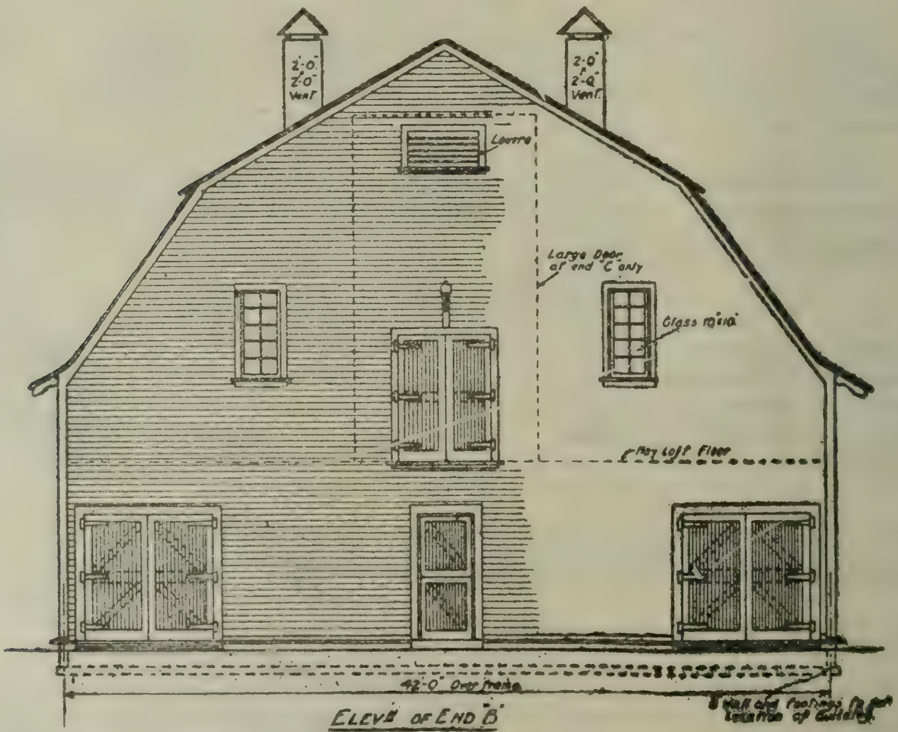
Exported to Europe	3,500	
Shipped to Winnipeg	7,000	
Shipped to Toronto	1,000	
Shipped to British Columbia	37,000	
Shipped to U. S. A.	3,000	
Total		51,500
Local consumption		65,000
Moved from summer to winter feeding		25,000
Total shipped by railway companies		141,500

VALUE OF SHIPMENT.

British Columbia	37,000 head at $70	$2,590,000.00
Manitoba	7,000 head at $70	490,000.00
Ontario	1,000 head at $70	70,000.00
		$3,150,000.00
Europe	3,500 head at $70	245,000.00
United States	3,000 head at $70	210,000.00
Total shipment out of province		$3,605,000.00



ELEVn OF SIDE "D."



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Side and End Elevation—Horse Barn

So much for a brief summary of what has been done and of the potentialities of developments. Taking careful consideration of the work in hand and of the ideal to be kept in view, the legislature in the session of 1910 made provision for the purchase and equipment of seven demonstration farms. The points kept in view were briefly as follows:

To secure farms which should be fairly typical of the district in which each farm was located.

To begin work, not upon an extravagant basis, but to so direct the operations as that similar work might be carried on by any farmer in the province who was provided with a reasonable amount of capital.

To work out in a practical way the problems of the farm pertaining to the growing and marketing of crops, the care and feeding of live stock, the feeding of dairy cattle, sheep, swine and poultry.

To form around these farms the nucleus of a system of agricultural instruction which would be a benefit to the farmers of the entire community and to the province as a whole.

Six of these have already been purchased, equipped, and are in operation. They are located as follows:

Medicine Hat—640 acres three miles west of Medicine Hat; Claresholm, 320 acres adjacent to the town on the south; Olds, 320 acres just east of the town; Sedgewick, 640 acres east of the town; Stony Plain, 480 acres a short distance to the south; Vermilion, 320 acres adjacent to the town on the west.

In addition land has been purchased at Athabasca Landing—483 acres, one mile east of the town. It has not yet been equipped.

Competent managers have been secured for each farm, the object being to obtain in each case a thoroughly practical man who would not only be in a position to guide the operations of the farm, but to assist in various other ways in the educational work in contemplation. A definite building plan was outlined, and this has been practically all carried into effect.

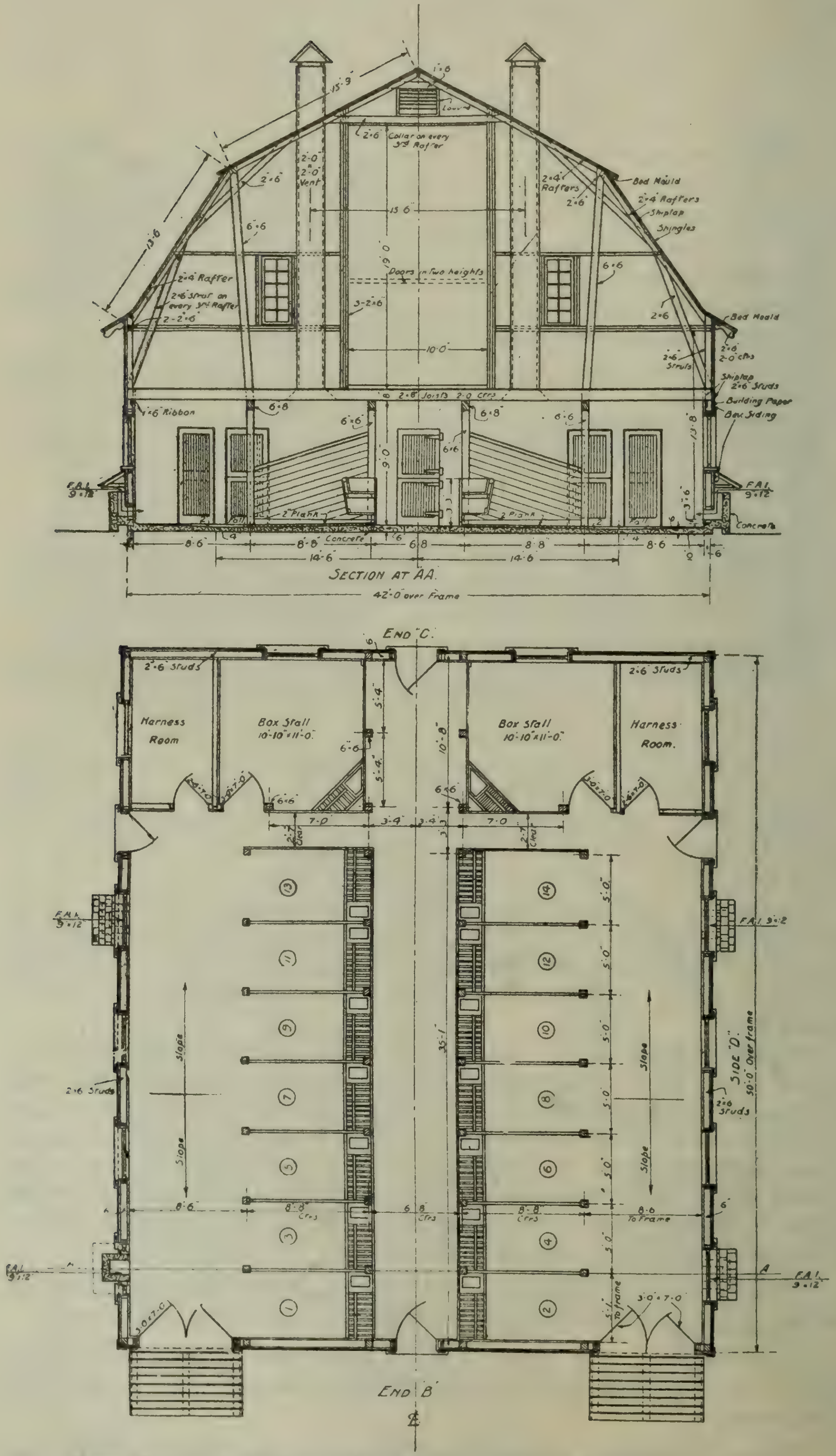
On each of the farms the following buildings were erected: Manager's house, $4,000; men's lodging house, $1,850; dairy barn, $3,300; horse barn, $2,300; hog pen, $700; four hen coops, $150 each; shed, $500; root house, $700; ice-house, $300; milk house and pump-house, $500; yards, $250.

These buildings are not extravagant, but it was essential, in view of the live stock work which was being undertaken on these farms, that buildings of fairly substantial character should be erected at the start. On a farm used for demonstration purposes it was, of course, necessary to keep more varieties of cattle than would be considered wise on an ordinary farm. Provision had to be made for accommodation for stock similar to that at present on the farms. At the end of 1912 the live stock upon the different farms was as follows:

Claresholm: 16 Ayrshire cows, 8 calves and 1 bull; 14 Shorthorn cows and 1 bull; 10 heavy horses, 1 driving horse, 10 hogs, 82 steers.

Medicine Hat: 24 Jersey cows, 5 calves and 3 bulls; 10 heavy horses, 1 driving horse and 2 colts; 26 hogs; 1 goat; 30 hens (Buff Orpingtons).

Olds: 105 steers; 10 registered Holstein cows, 2 heifer calves and 1 bull; 18 grade Holstein cows; 13 horses; 2 colts; 36 hogs; 35 hens (Barred Rocks).



Cross Section and Plan—Horse Barn—showing Ventilating System

Vermilion: 14 registered Holstein cows, 1 bull and 2 heifers; 14 grade Holsteins; 102 sheep (grade Oxford); 6 sheep (registered Oxford); 29 hogs; 10 heavy horses, 2 driving horses and 1 yearling; 110 hens (Rhode Island Reds).

Sedgewick: 106 feeding steers; 10 registered Shorthorn bulls, 24 cows, 5 heifers and 10 calves; 8 grade cows; 15 work horses, 1 driving horse, 2 foals.

Stony Plain: 46 Holstein cows and 1 bull; 12 working horses; 1 team driving horses; 14 hogs; 152 hens (Barred Rocks).

Full details of the plans of the different buildings will be found in the illustrations of this report. In the plans it had to be borne in mind that on most of the farms a considerable dairy herd would be maintained, in addition to the important work of feeding steers in the open. The contour of the ground and the direction from the town, as well as the arrangement for general convenience, had to be taken into account. As a general rule, we have found it better to place the dairy barn on the west side and the horse barn on the east, with a high board fence joining the two, or the horse barn may form an L with the cow barn, with a yard facing south and east. The object is to have the buildings afford some shelter to the yard in which the feeding of the steers is done.

As will be seen from the plan of the dairy barn, the cows face each other in two rows. A loft is provided of a size sufficient to hold feed for five or six weeks. The rough feed is dropped through a chute from the loft into the feed room at the end of the barn. The roots and chop are here mixed with the cut feed and let stand some time before feeding. Grain bins are located in the loft immediately above the feeding room, from which grain chutes are joined to the feed room floor. In the loft is also located a grinder and straw cutter, and the root pulper is located in a corner of the room below.

The watering system is not yet completed in all of the barns, but will be installed on the following plan. The well is located about 30 feet from the dairy barn. Over this is a small pump-house which holds the pump and a two-horse-power gasoline engine, also a small tank and stove. The water tank is situated in the loft of the pump-house, immediately above the stove. This prevents any possibility of freezing. From this a pipe is run to the dairy barn, and the water conveyed to the manger from which the cattle get their regular feed. The manger is swept out after feeding, and the water turned in. When the cattle are through drinking, a plug is opened in the end of the manger, from which a drain runs to a hole in the ground a short distance from the end of the building. From this the water escapes by seepage. In some farms it will be impossible to do this as the nature of the soil is such that the water could not escape, and in these cases water cups will be installed.

Ventilation is a very important feature, especially in connection with the feeding of dairy cattle, for not only does poor ventilation lead to a lowering of the vitality of the animals, but there is also the necessity of keeping the stable odors from the milk. There is a cement box about three feet high on the outside of the building. The air comes through this at the floor of the building, and is conveyed up about three feet by a box on the inside of the wall. This prevents a direct draught on the animals. There are three of these intakes on each side of the wall. The outlets commence at the ceiling, and are about two feet square—two on each end. These outlets consist of two boxes one inside the other, and one about two inches larger than the other with paper between. This gives a dead-air space so that the warm air does not chill. It thus prevents condensation and consequent drip from outlets. This shaft runs straight through the roof above the apex. Lids and shutters are placed on both intakes and outlets to secure proper control of the temperature.

Our experience has shown certain points in which improvements on the plans can be made, and we consider that the dairy barn erected at Stony Plain has some advantages over the others. Calves and bulls are kept in a barn away from the rest of the cattle. This minimizes the restlessness of both. Less room is wasted with passageways. The feed room is in a corner of the barn instead of being in the centre of the end, and is thus in closer proximity to the root cellar.

FEEDING DAIRY CATTLE.

The feeding of the dairy cattle is as yet in an evolutionary stage. Some of the farms were stocked rather too late in the summer to secure accurate records, and it is too early to get feeding data which could be regarded as of scientific value. The cows have been fed largely on green oat sheaves run through a cutting box and also wild hay once a day. The chopped feed consists of two-thirds oats and one-third barley; each cow gets from one pound to one and one-half pounds per day of oil cake. This meal is mixed with the cut feed.

The milk is sold to local dealers in Medicine Hat, Calgary and Edmonton.

The Vermilion farm is the only one on which to date the milking records are of any value. The weighing was begun on July 14th. The record is not as good as it otherwise would be, for animals which have been shipped in and placed in new surroundings are not in a condition to make a record which they otherwise might. The records are as follows:

DEMONSTRATION FARM, VERMILION, PERFORMANCE OF COWS, 1912.

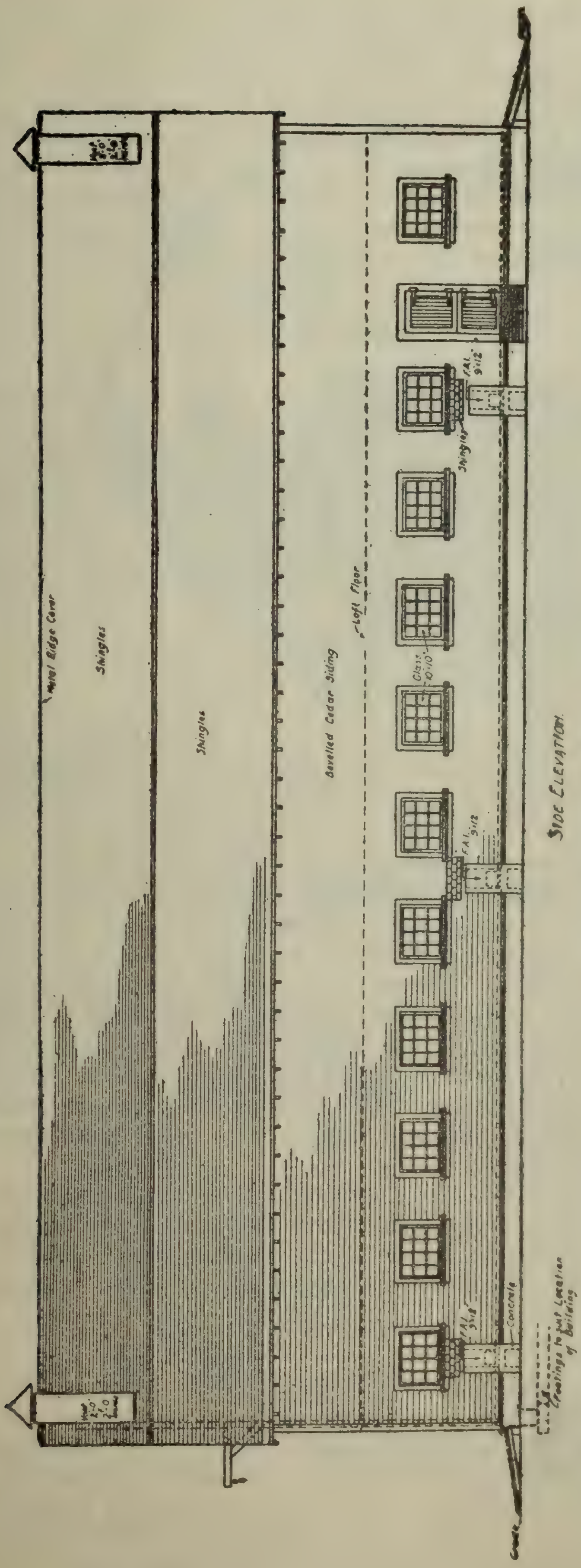
Weighing began July 14th; Weighing ended December 31st.

Arranged in order of merit.

		lbs. milk.
1.	Pure-bred, Julia O' Bell	7,212
2.	Pure-bred, Lily Whitzyde	5,462
3.	Pure-bred, May Dekol Queen	5,455
4.	Pure-bred, Georgie	5,289
5.	Grade No. 12, Irene	5,034
6.	Pure-bred, Barbara Jensen 3rd	4,600
7.	Grade No. 10, Favorite	4,564
8.	Pure-bred, Vrouka Queen	4,380
9.	Pure-bred, Blossom Hungerweld Teake	4,254
10.	Grade No. 11, Bessy	4,238
11.	Grade No. 15, Princess	4,216
12.	Pure-bred, Cora	4,180
13.	Grade No. 14, Kate	4,088
14.	Grade No. 13, Jessy	3,969
15.	Grade No. 16, Beauty (two-year-old)	3,943
16.	Pure-bred, Maxy's Beauty	3,882
17.	Pure-bred, Barbara Jensen	3,591
18.	Pure-bred, Black Belle	3,572
19.	Pure-bred, Vrouka 5th Abbekirk	2,967

HANDLING OF HORSES.

Most of the horses kept on the farms are mares. These are all bred, and those which do not prove to be in foal are used to do the heavy work.



Side Elevation—Dairy Barn

In the winter months these horses are allowed to run outside with a shed for shelter. They are given all the straw, water and salt they want, and green sheaves night and morning. A couple of teams are stabled all the time to do the regular hauling of feed, ice, fuel, etc. Towards spring they are all taken into the stable and fed hay and oats to prepare for spring work. At this time they are also fed some boiled oats or barley once a day. The horses inside get green oat sheaves twice a day, with hay at noon and boiled feed mixed with cut green sheaves at night. In cases where heavy work is being done dry oats and bran are fed in amounts depending on the work they are doing.

SHEEP HANDLING.

Little has been done as yet with sheep. The first flock has been established at Vermilion. These are Oxford grades with a few pure-bred Oxfords. An open shed has been built for protection. A low feeding rack with trough is located partly inside this shed and partly in the open. Prairie hay is fed twice a day with a small feed of ground oats once a day. Some bright clean oat straw is also available to them at all times, as is also salt and water. The ewes were bred to lamb in the latter part of April and May.

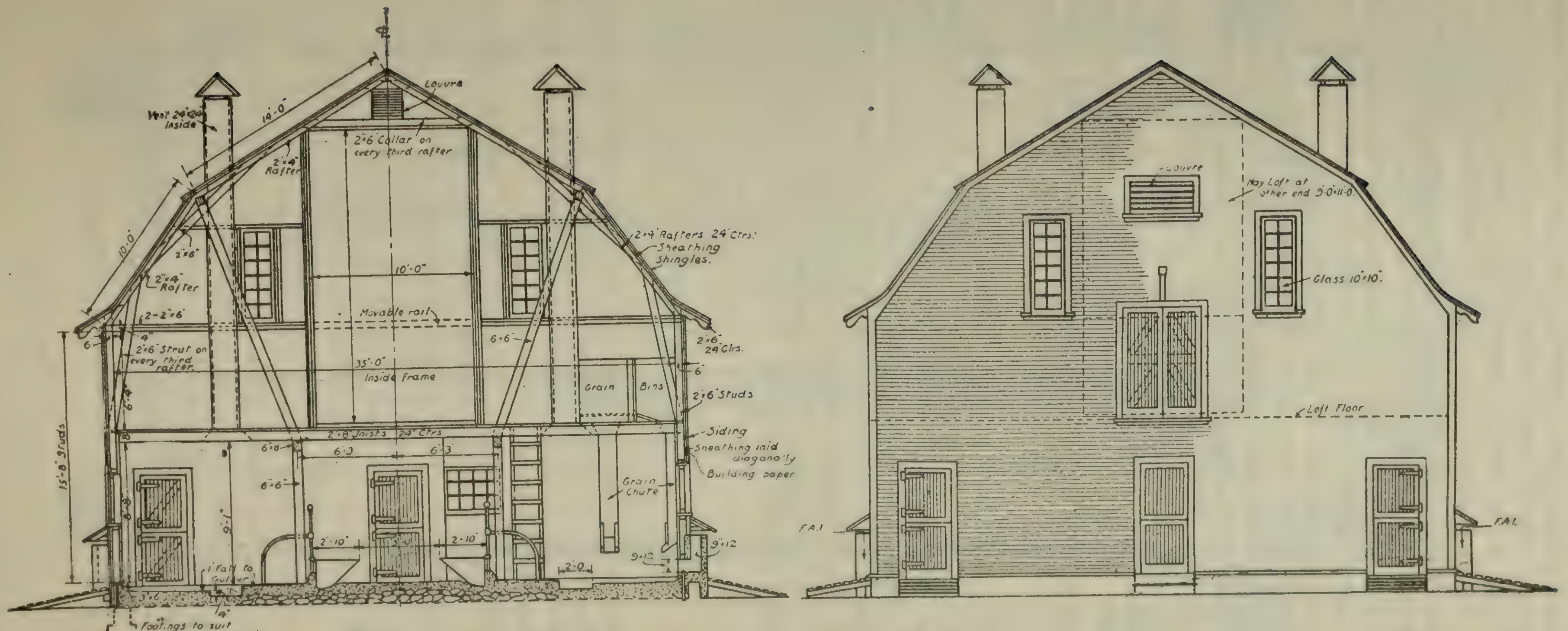
HANDLING OF HOGS.

Pure-bred Berkshire hogs are kept at Claresholm, Medicine Hat and Vermilion; Yorkshires at Olds, Stony Plain and Sedgewick, and a few Tamworths at Olds. The sows are bred to farrow in the fall and spring, and the young pigs are sold to farmers at weaning time. The breeding hogs run with the feeding steers in winter, getting most of their living from what is wasted by the cattle. In this way the hogs get lots of exercise, and cost very little in the winter months. As the sows become heavy with pig, they are removed from the steer yard so as to prevent injury by the steers. The sows are then fed ground grain, principally oats, with some roots—either mangels or turnips—and where milk is separated they are fed some skimmed milk. In some cases middlings, shorts and oil cake meal are added to the grain ration in small quantities. As soon as the young pigs will eat, they are given some skimmed milk, and later skimmed milk and shorts, or in some cases ground oats with hulls sifted out.

In summer time, where possible, all the hogs are allowed to run on a pasture of rape, green oats, barley or rye, in addition getting a ration of ground oats and barley or shorts in quantities depending on the age of the hogs and the supply of the material. The pasture materially reduces the cost of some of the feeding.

FEEDING STEERS.

This has been one of the first lines of work undertaken. Success depends on definite principles. A very important part of the work of feeding steers for profit comes on the day when you make the selection of animals. There is such a wide difference in individuality, even in a bunch of comparatively even quality, that there is wide room for difference in results, even in a change from the profit to the loss side of the account.



SECTION A-A.

END ELEVATION

Cross Section and End Elevation—Dairy Barn

The animal we should always aim to secure is the thick, broad, low-set, contented-looking type, carrying flesh on top with plenty of heart-girth and broad, short head, indicating vigor and intelligence. What we try to avoid is the rough, loose, leggy animal with thin, long head and horns. It is impossible to make a satisfactory feeder out of an animal of this kind; and not only does he prove unsatisfactory himself, but as an animal of this type is frequently wild, he disturbs the rest of the stock. It is quite possible to have an animal of this kind actually lose weight after having been fed under the same conditions as other steers that put on 250 lbs. in six months. It is, of course, advisable to watch for the diseased animal in selecting your feeder. Generally the sick animal will show some signs of ill-health by its coat and general lack of vigor, but even this may not be an indication in such diseases as lump jaw, and this should be especially guarded against.

We also avoid as far as possible white cattle. They do not seem to stand the cold so well. It is a singular fact that white colored animals have not done so well in the feed lots in the different stations as the darker, richer colored animals. This is also true of dull yellow colors, or blacks with sun-burnt backs, and in selecting it is well to avoid animals of these kinds.

Three-year-old steers produce the best results. Younger animals do not stand colder weather so well, nor will they stand the heavy feeding, so the actual gains are not so great as with the older animals. While five-year-old animals in some cases feed well, there is always difficulty that in purchasing five-year-olds you probably get the rough ones cut out by the buyer the previous year, and, of course, their growth is not so great as the four-year-old. Strict attention to the selection of the animals is the all-important feature in the laying of the foundation of successful feeding.

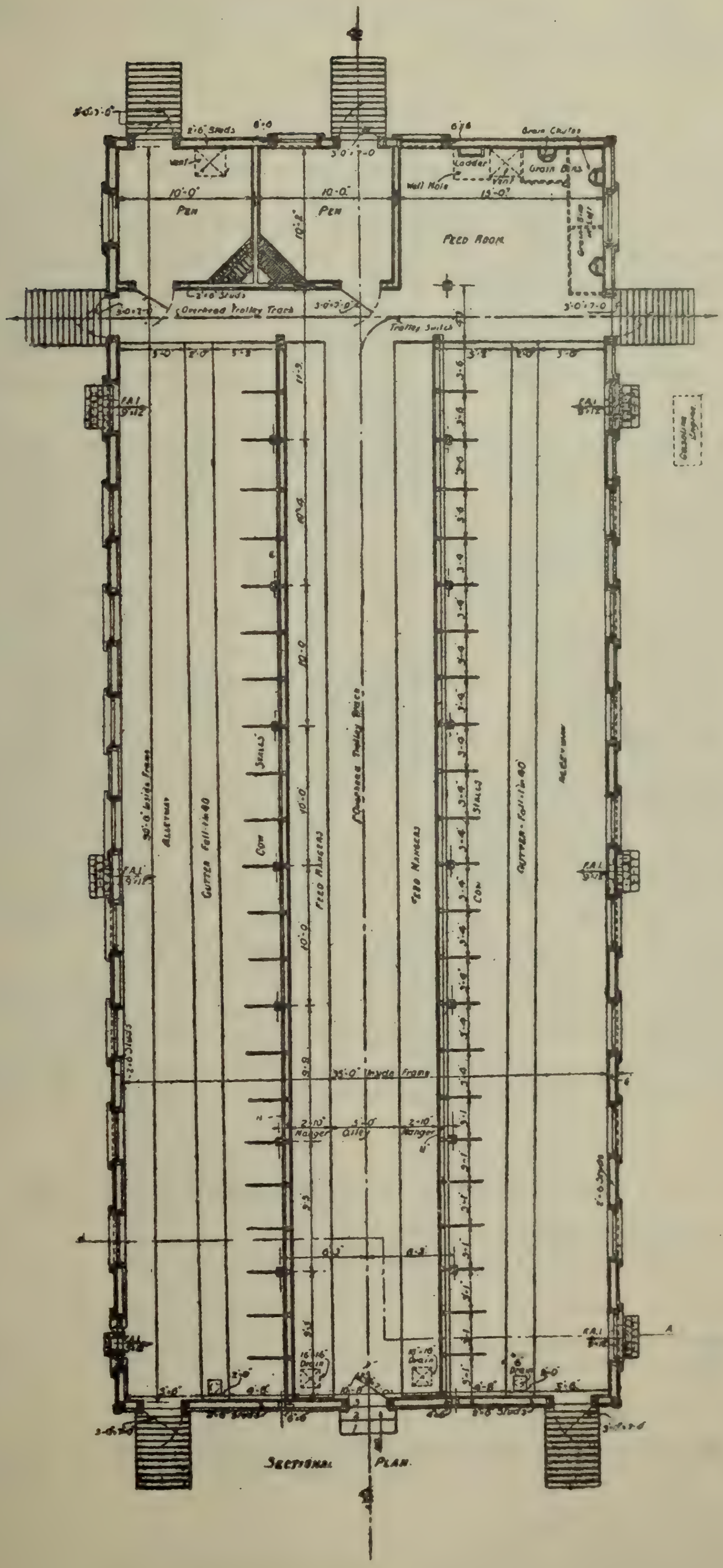
Handling.

It is essential in feeding that the animals should be kept as quiet as possible. This can be accomplished by having only one regular attendant. The cattle get familiar with him, and there is not the same alarm at his presence in the yard.

The shelters used on the different farms require little description. The cheaper these are the better, providing they serve the purpose of holding the cattle. Two of the yards are located beside the barns which give a certain amount of protection from the winds. On the north and west side we have an eight-inch close-board fence. On these fences we have feed racks similar to those used in the ordinary railroad stock-yard. They are made by using 2 x 4 scantling placed about six inches apart. The long feed is stacked just outside this fence, and is thrown over the fence into the racks. We have a long table with eight-inch sides for cut feed and chop. This table should be about three feet high and four feet wide, and it requires about three feet per steer for feeding space. One bunch of steers was fed entirely in the open with nothing but a bluff for shelter. In this case we had a V-shaped rack built for feeding the long feed, and used the tables the same as in the enclosure for cut feed and chop.

Watering.

The steers were watered in each case from a galvanized iron tank. The ice was kept off the water by means of a heater set in the tank. This



Plan—Dairy Barn

is an especially constructed heater for the purpose, and the water comes in contact with it. A comparatively small amount of coal is sufficient to keep the water from freezing.

Feeding.

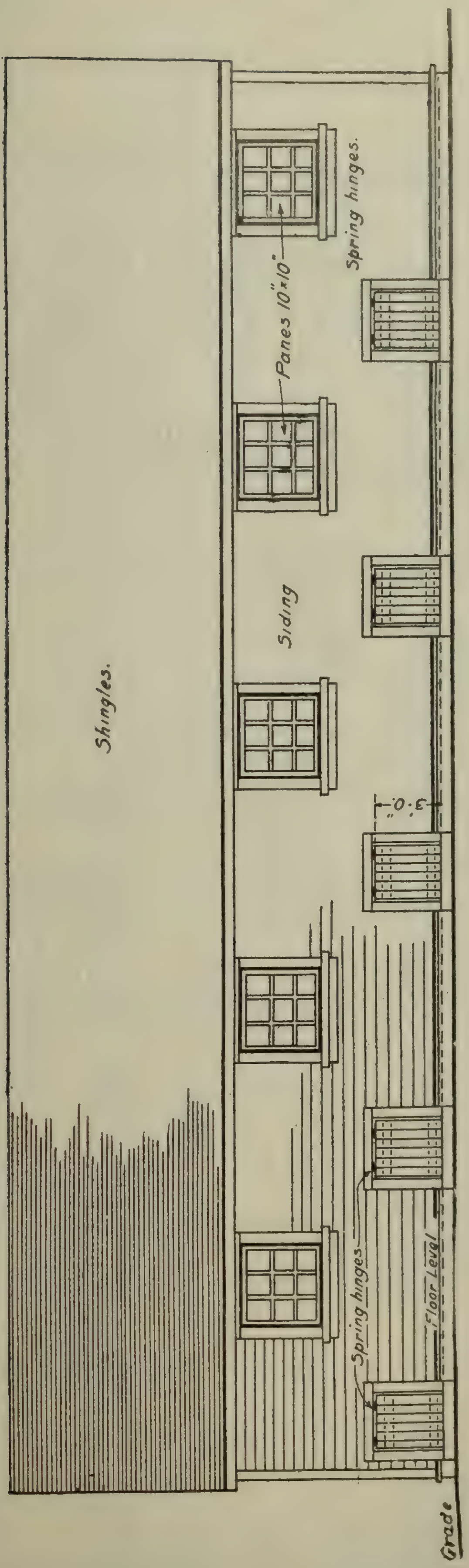
The steers were divided into three lots: All of No. 1 were fed cut feed entirely, principally green oats and some wheat with chop in addition. All of lot No. 2 were fed sheaf oats and cut feed twice a day with chopped feed mixed with it. All of No. 3 were fed sheaf oats and wheat, and the chopped grain was fed separately. Although our results have extended over one year only, and as such cannot be absolutely conclusive, they were in favor of the cut feed and chop mixed. There was not much difference, however, between this against long feed with cut feed and chop mixed.

One strong point in mixing the chop with cut feed is that each steer is more likely to get his fair share of the feed. Where the chop is fed alone, some animal is sure to get more than his just share. Not only does this deprive the more timid animal of sufficient, but it is apt to give too much to the other, and thus put him off his feed. So far as our experiments go, it would indicate that it does not pay to have the grain ground exceedingly fine. We were enabled to feed much more heavily with the coarse ground feed, and there was much less liability for the animals to go off their feed. Where we were feeding coarsely ground chop we were able to bring them up to an allowance of 14 lbs. per day; and where it was finely ground it was with difficulty that they could stand 12 lbs. per day. Of course, in the beginning, to feed the chop a start was made at about three pounds, and the ration gradually increased, until a maximum of 12 or 14 lbs. was reached. The chop was started about the first of the year, and in two and one-half months the cattle were on full ration. The chop consisted of oats and barley, or oats and frozen wheat. The frozen wheat did not give very good results. Definite statement of this cannot be made as yet, but indications point that way.

Of course, our experiments are in a large measure inconclusive. Definite results in this line can only be secured by work covering a number of years, but the results so far have been satisfactory and more work will be carried on from time to time. The results of the experiments at Claresholm, Olds and Vermilion can be gleaned from the following figures:

Statement of Steer Feeding at Claresholm Demonstration Farm.

Weight of 22 steers weighed out on May 27th		33,130
Weight of 22 steers weighed in on November 22nd, 1911		26,855
Total gain in weight		6,275
Average weight of 22 steers weighed out		1,506
Average weight of 22 steers weighed in		1,220
Average gain per head		286
By sale of 22 head of cattle May 27th at $6.60 per 100		$2,186.58
By gain in weight of 4 hogs running after steers, $9 per hog		36.00
Total amount realized		$2,222.58
To cost price of 22 steers, 26,855 lbs. at $4.80 per 100	$1,289.04	
To freight from Pagan to Claresholm	14.59	
To interest on note five months at 7%	40.00	



SOUTH ELEVATION.

Hog Pen

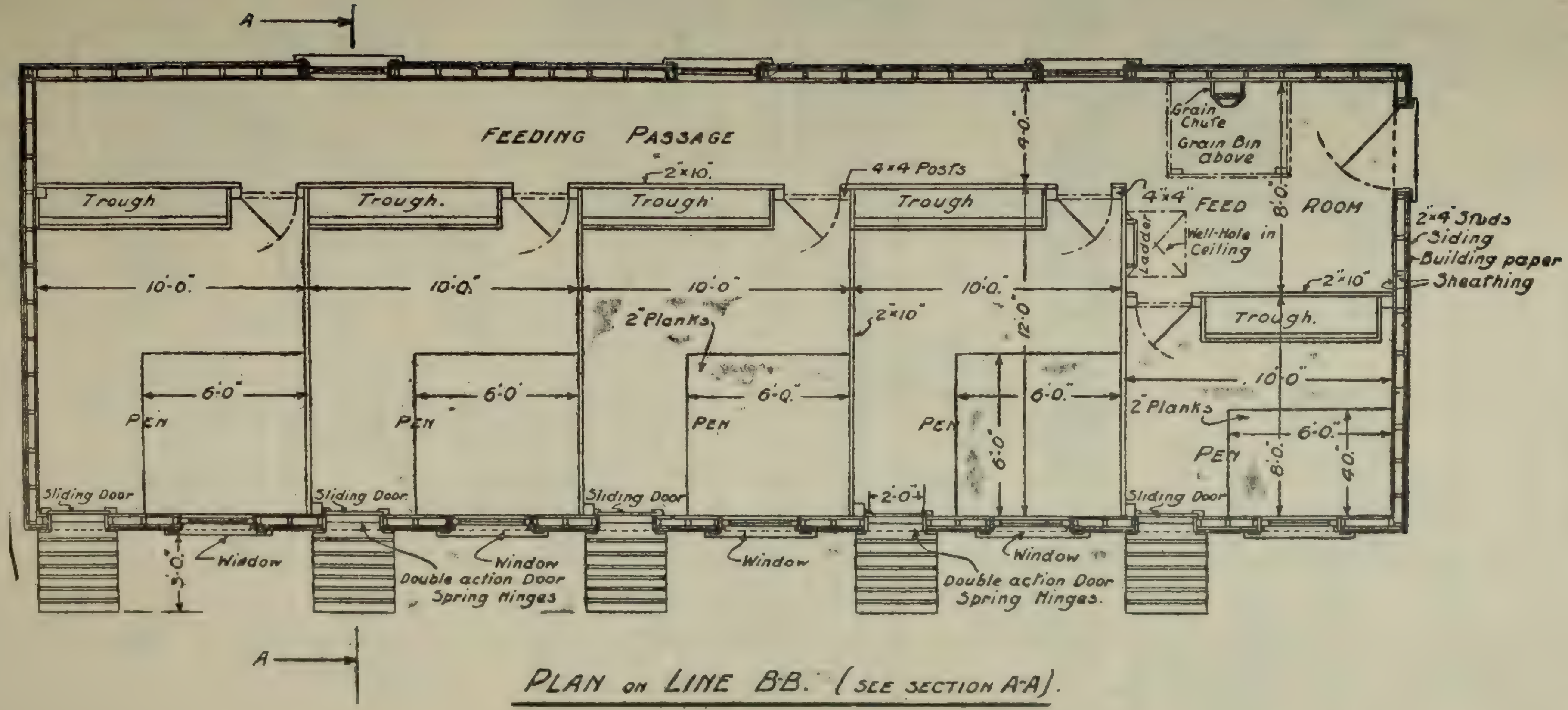
To feed of steers:		
Grain	227.00	
Green feed	316.00	
Wild hay	35.50	
Salt	2.00	
Labour	120.00	
Gasoline	15.00	
Total cost of steers		$2,059.13
Total net gain		$ 163.45
Net gain per head		$7.43
Average selling price per steer, including profit of $36 gain in weight of hogs		$101.02
Average purchase price per steer		59.26
Gross profit per head		$41.76

Statement of Steer Feeding at Olds Demonstration Farm.

Weight of 98 steers weighed out on May 29th		147,950
Weight of 1 steer weighed out on January 17th		1,350
		149,300
Weight of steers weighed in on October 30th, 1911		127,540
Total gain in weight		21,760
Average weight of 99 steers weighed out		1,509
Average weight of 100 steers weighed in		1,275
Average gain per head		234
By sale of 99 head of cattle May 29th at $6.65 per 100		$10,005.35
By sale of one steer January 18th at $5.25 per 100		70.70
By gain in weight of eight hogs running after steers, $9 per hog		72.00
Total amount realized		$10,148.05
To price of 100 steers, 127,540 lbs. at 4½c	$5,739.30	
To interest on note, seven months at 7%	234.00	
To feed of steers:		
Grain	1,456.10	
Wild hay	468.40	
Green feed	498.00	
Salt	10.00	
Labour	700.00	
Gasoline used for cutting and grinding feed	30.00	
		$9,135.80
Total net gain		$1,012.25
Net gain per head		$10.12
Average selling price per steer, including profit of $72 made on gain in weight of hogs		$101.48
Average purchase price per steer		57.39
Gross profit per head		$44.09

Statement of Steer Feeding at Vermilion Demonstration Farm.

Weight of 69 steers weighed out on May 7th		93,825
Weight of 70 steers weighed in on November 6th, 1911		88,480
Total gain in weight		5,345
Average weight of 69 steers weighed out		1,360
Average weight of 70 steers weighed in		1,264
By sale of 69 head of cattle, May 7th. at $7.00 per 100	$6,533.25	
By gain in weight of 11 hogs running at $9 per hog	99.00	
		$6,632.25



Plan of Hog Pen

To price of 70 steers, 88,480 lbs. at $4.75 per 100	$4,202.80	
To freight from Fort Saskatchewan to Vermilion	93.00	
To brand inspection	3.50	
To interest on note from November 22nd to May 17th, 1912	151.01	
To feed of steers:		
Hay	169.25	
Oats, barley, wheat	500.00	
Green feed	654.00	
Gasoline	27.71	
Labour	225.00	
Total cost of steers		$6,031.77
Total net gain		$600.48
Net gain per head		$8.70
Average selling price per steer, including profit of $99 gain in weight of hogs		$96.12
Average purchase price per steer		60.04
Gross profit per head		$36.08

Better results could probably be obtained with further experience. But from results so far accomplished, we feel justified in undertaking further work along this line, and in considerably extending our field of operations.

FARM WORK AND TILLAGE.

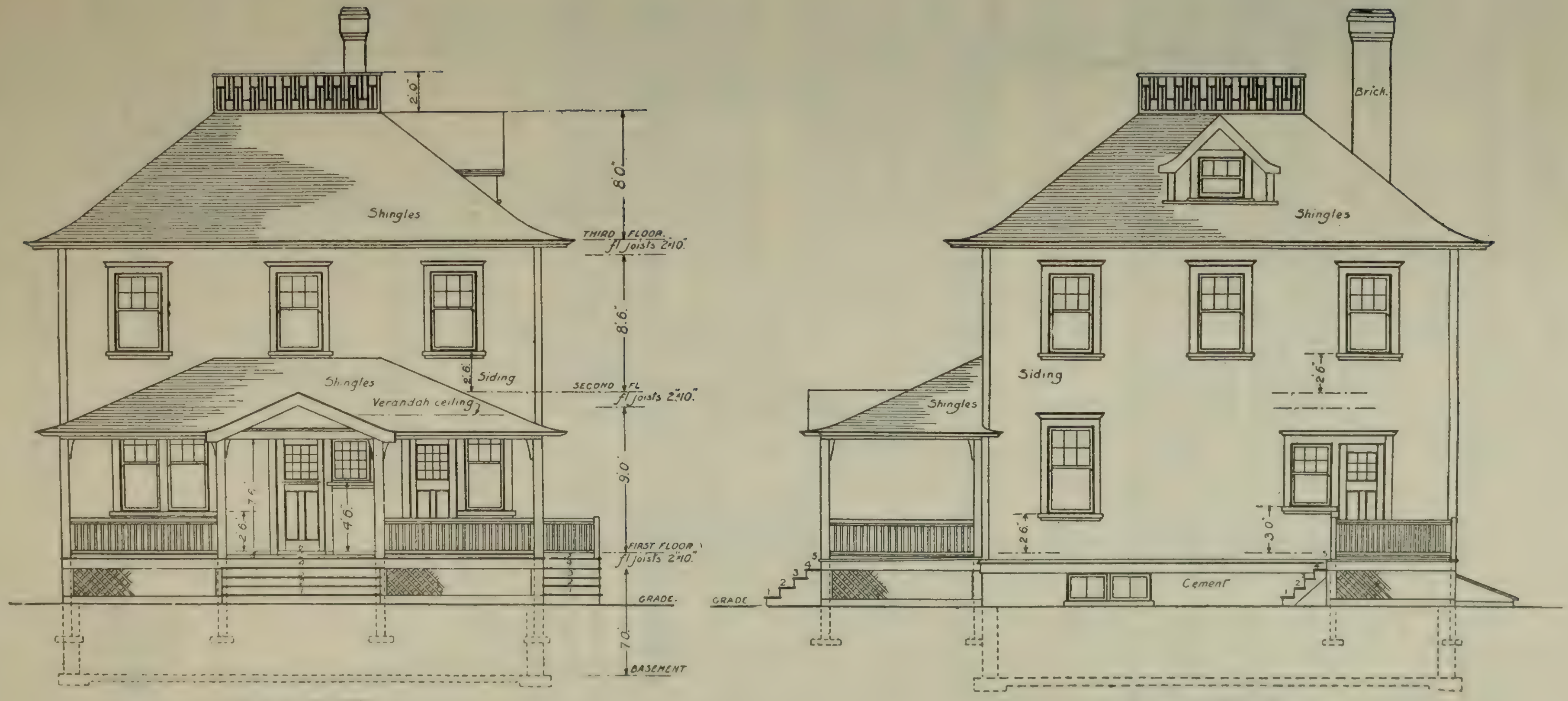
It is too early as yet to lay down definite methods of cultivation. In this report we practically confine operations to a record of the work done. Later on when what were only a short time ago stretches of unbroken prairie have become cultivated farms, it will be possible to compare methods of tillage and also methods of general farm operations and draw more definite conclusions.

The fencing of the various farms is done with woven wire and eight-inch split cedar posts placed about one and one-half rods apart. Barb wire is used on the top. These fences surround the farm on each and every side. Very little cross-fencing has as yet been done, and no permanent pastures have been laid down. Forage crops, such as oats, fall and spring rye and beardless barley, are used temporarily, wire fences having been used for fencing these off.

Methods of Cultivation.

Practically all the farms were raw prairie when purchased. The land was broken about five inches deep. The breaking at Medicine Hat, Sedgewick and Claresholm farms was done in the latter part of May and June. At Olds and Stony Plain and Vermilion, where the soil was deeper and heavier, the breaking was commenced as soon as the spring work was completed, and continued until the first week in September, except for a few days when the ground was too dry.

In the brush land, the breaking was done from seven inches to nine inches deep in order to get below the roots and make a thorough job of the plowing. The land was thoroughly packed and throughout the season was disced and harrowed sufficiently often to hold the moisture in the ground and to assist in the rotting of the sod. Effort was made to have the breaking thoroughly uniform, both as to depth and the clearness with which the furrow was cut and turned. As soon as the land could be worked in the spring, a good seed-bed was prepared, and where the land seemed dry a packer was used after seeding. In most cases this was not



FRONT ELEVATION.

SIDE ELEVATION.

Front and Side Elevation.—Manager's House necessary as the pressed drill was used on all the farms, and most of the ground was in excellent condition from the breaking of the previous summer. Some fall plowing was done, although the pressure of other work in getting the farm in shape prevented as much being accomplished as otherwise would have been done.

At Medicine Hat farm some land was broken three inches deep early in the season, and later, when the sod had rotted, this was backset to a depth of five and one-half inches. The land was packed and harrowed immediately after plowing in each case. No crop has been taken off this as yet, and it is impossible to get report of results.

The soil being widely different on the various farms, there is considerable variation in the crops sown. Kharkoff wheat was sown at Medicine Hat and Claresholm. Spring wheat was sown at Medicine Hat, Claresholm, Sedgewick and Vermilion. The varieties used were Red Fife, No. 46, and Marquis. The soil of these four farms is of lighter nature than at Olds and Stony Plain, consequently permitting earlier sowing and more rapid ripening.

Oats and barley were sown on all the farms, not only for seed purposes but for feed, and the oats for a supply of green sheaves for feeding to all classes of stock.

At Medicine Hat some Turkestan alfalfa was sown, about ten pounds per acre. A seed-bed was prepared by summer fallowing the previous year. On ground so well prepared it might be well to use a little less seed per acre as the stand seems to be too thick. Small patches of alfalfa have also been sown at Sedgewick and Vermilion. Eight acres of corn were planted at Medicine Hat, which reached the height of seven feet. This was cut and stooked in the field, later being run through the cutting box, and is now being fed to the dairy cattle.

At Medicine Hat, Stony Plain and Vermilion from seven to ten acres of potatoes were grown on each farm. The yield running from 250 to 300 bushels per acre. Turnips and mangels were grown at Sedgewick, Claresholm and Stony Plain. The turnips gave much larger yields than mangels, and were an exceedingly good crop on every farm. Perhaps with longer cultivation, deeper plowing and more manure the mangels might have given better results, but so far as our experience went they were not so satisfactory as turnips.

ASSETS ON DECEMBER 31st, 1912.

Athabasca Landing.

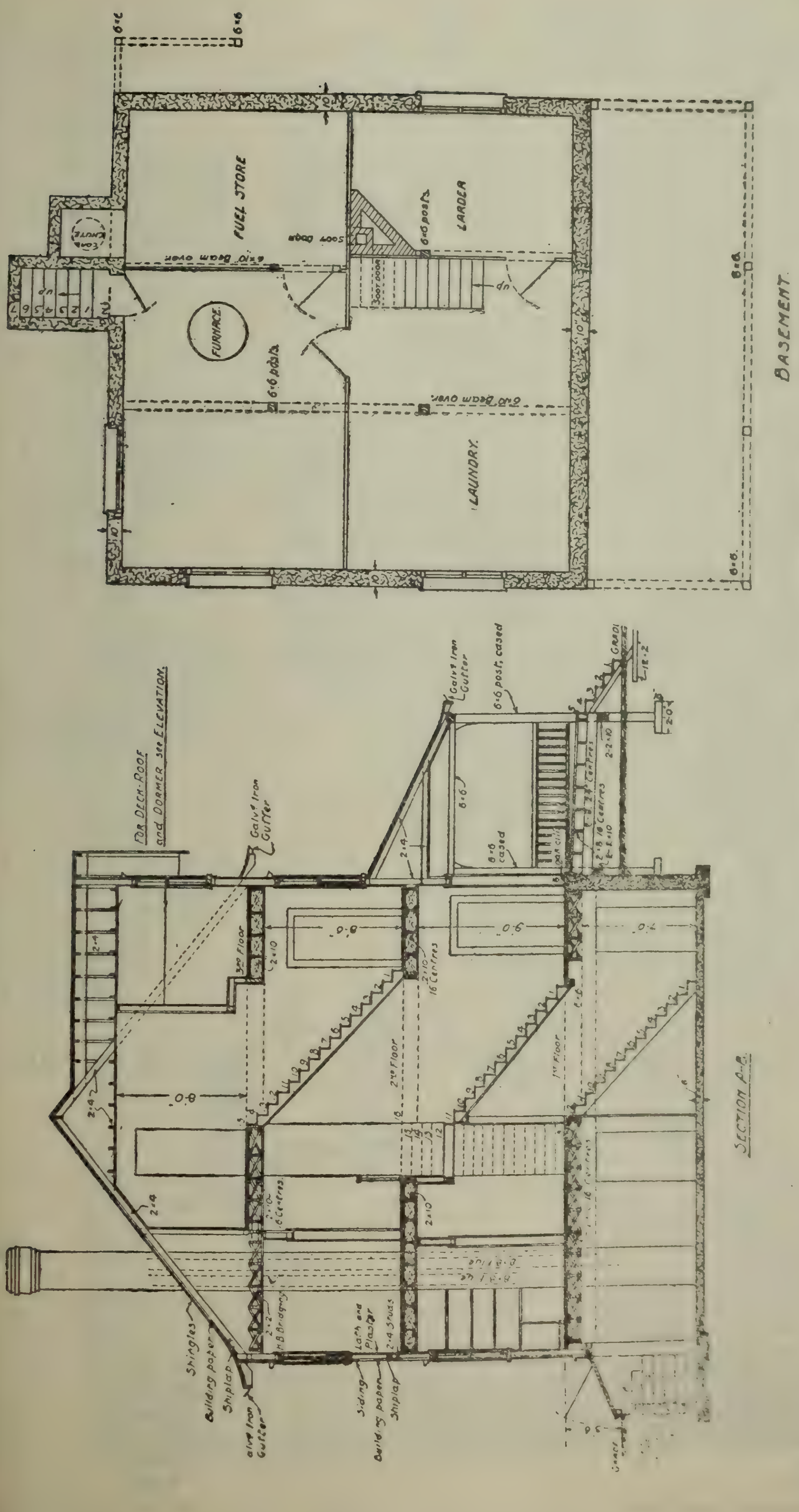
Land		$ 16,908.50

Stony Plain.

Land	$ 18,720.00	
Buildings	15,000.00	
Cattle, etc.	10,227.00	
Machinery, etc.	3,220.00	
Feed, seed, etc., on hand	3,250.00	
		$ 50,417.00

Vermilion Farm.

Land	$ 16,000.00	
Buildings	15,000.00	



Cross Section and Basement Plan—Manager's House

Cattle, etc.	11,279.00	
Machinery, etc.	3,762.75	
Feed, seed, etc., on hand	2,140.00	
		$ 48,181.75

Sedgewick Farm.

Land	$ 28,800.00	
Buildings	15,000.00	
Cattle, etc.	15,735.00	
Machinery, etc.	3,805.00	
Feed, seed, etc., on hand	5,448.75	
		$ 68,788.75

Olds Farm.

Land	$ 16,000.00	
Buildings	15,000.00	
Cattle, etc.	10,896.00	
Machinery, etc.	3,275.00	
Feed, seed, etc., on hand	1,530.00	
		$ 46,701.00

Claresholm Farm.

Land	$ 17,255.15	
Buildings	15,000.00	
Cattle, etc.	10,505.00	
Machinery, etc.	3,440.76	
Feed, seed, etc., on hand	4,376.00	
		$ 50,576.91

Medicine Hat Farm.

Buildings	$ 15,000.00	
Cattle	13,242.00	
Machinery, etc.	3,044.00	
Feed, seed, etc., on hand	1,655.60	
		$ 32,941.60
		$314,515.51

REVENUE RECEIVED FROM THE DEMONSTRATION FARMS FOR THE YEAR 1912.

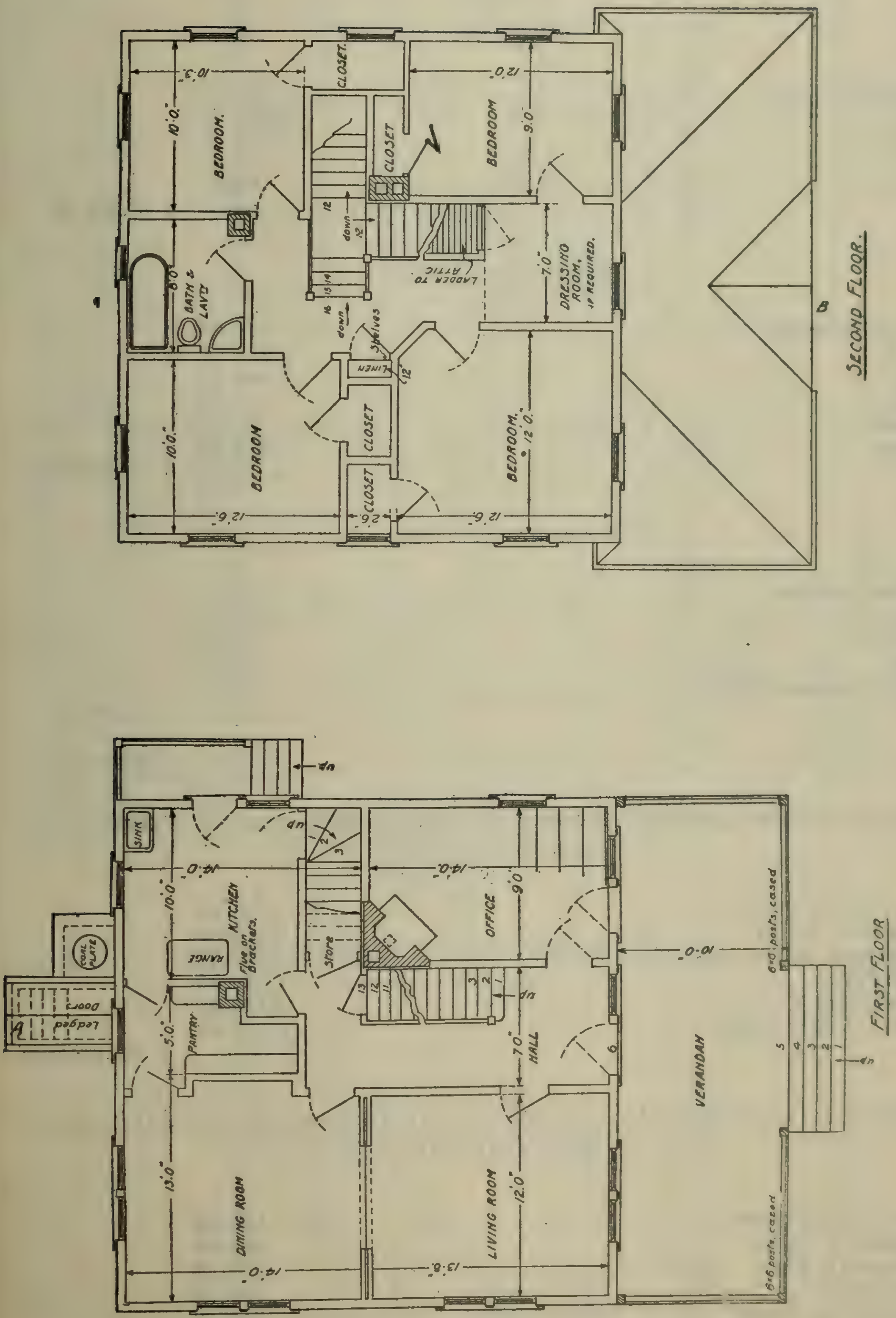
Stony Plain Farm.

Dairy	$ 282.21	
Roots and vegetables	200.84	
		$ 483.05

Vermilion Farm.

Capital account	$ 81.20	
Dairy	1,423.85	
Poultry	23.23	
Steers	1,978.32	
Hogs	256.50	
Horses	2.00	
Vegetables and roots	202.00	
		$ 3,967.10

No. 8.—Jerseys on Demonstration Farm, Medicine Hat.



Floor Plans—Manager's House

Sedgewick Farm.

Dairy	$ 234.24	$ 234.24

Olds Farm.

Capital account	$ 475.00	
Dairy	2,535.02	
Steers	4,034.96	
Hogs	65.00	
Horses	450.00	
		$ 7,559.98

Claresholm Farm.

Capital account	$ 228.00	
Dairy	1,332.48	
Steers	843.00	
Hogs	40.50	
Horses	23.85	
Wheat	382.00	
		$ 2,849.83

Medicine Hat Farm.

Capital account	$ 175.00	
Dairy	3,482.95	
Poultry	13.20	
Hogs	82.00	
Vegetables and roots	14.20	
		$ 3,767.35
		$ 18,861.55

VALUE OF FEED AND SEED GROWN ON THE DEMONSTRATION FARMS FOR THE YEAR 1912.

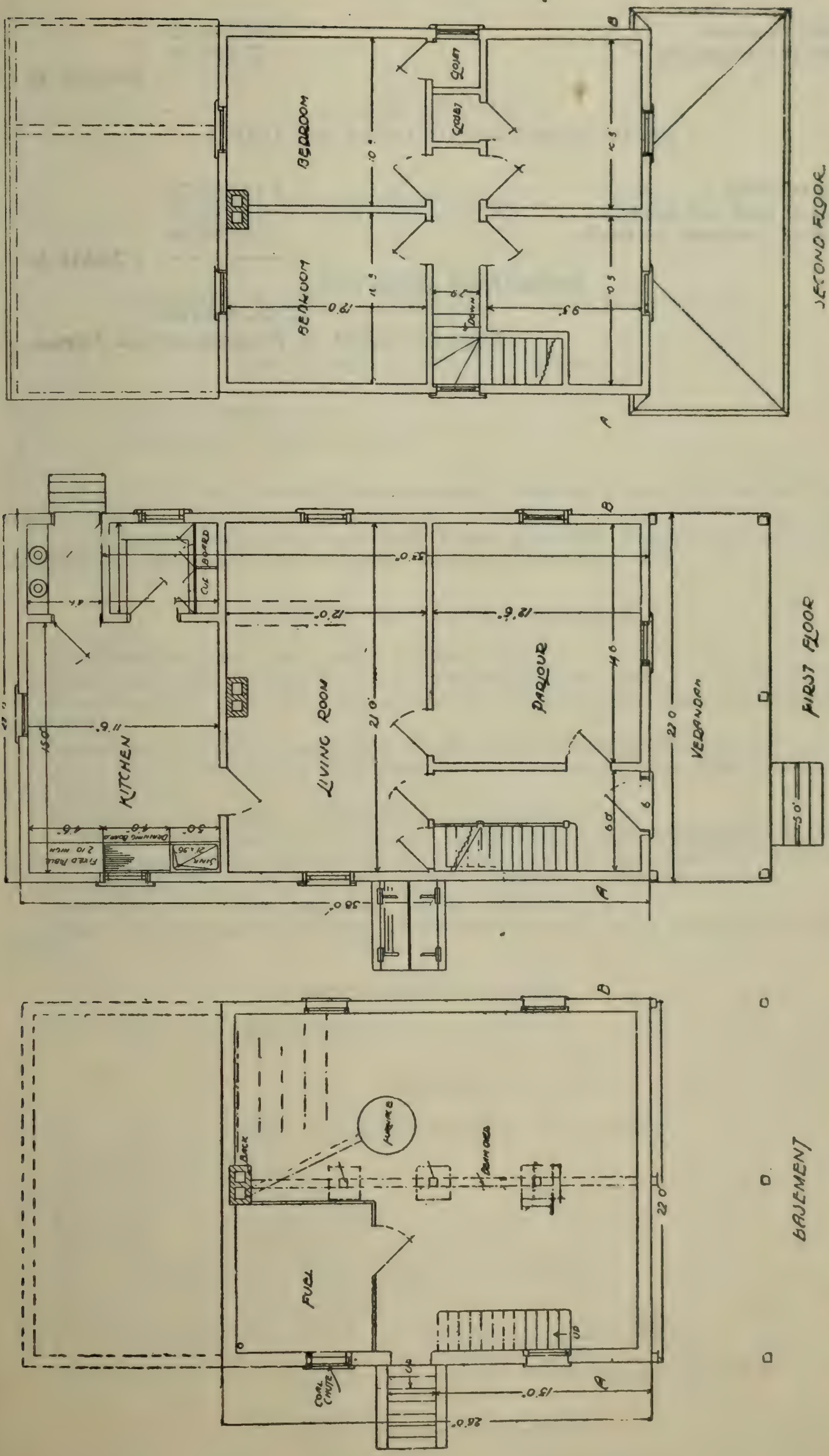
Stony Plain Farm	$ 2,110.00	
Vermilion Farm	2,215.00	
Sedgewick Farm	5,039.75	
Olds Farm	1,710.00	
Claresholm Farm	4,415.00	
Medicine Hat Farm	1,275.00	
		$ 16,764.75

VALUE OF INCREASE IN LIVE STOCK ON THE DEMONSTRATION FARMS FOR THE YEAR 1912.

Stony Plain Farm	$ 160.00	
Vermilion Farm	384.00	
Sedgewick Farm	680.00	
Olds Farm	850.00	
Claresholm Farm	740.00	
Medicine Hat Farm	875.00	
		$ 3,689.00

Total Assets.

Total assets	$314,515.51



Plans—Farm Cottage

Total Expenditure.

Capital account	$259,186.82	
Operating expenses	27,329.50	
		$286,516.32

TOTAL PRODUCTION OF FARMS FOR 1912.

Cash revenue	$ 18,861.55	
Value of feed and seed	16,764.75	
Value of increase in stock	3,689.00	
		$ 39,315.30

Respectfully submitted,

H. A. CRAIG,
Superintendent of Demonstration Farms.

14.—*APPENDICES.*

APPENDIX A.

ALBERTA HORSE BREEDERS' ASSOCIATION.

FOURTEENTH ANNUAL REPORT.

HON. DUNCAN MARSHALL,
Minister of Agriculture.

SIR,—

I beg to submit herewith the fourteenth annual report of the Alberta Horse Breeders' Association for the year 1912-13.

The annual meeting of the Alberta Horse Breeders' Association was held in the horse show building, Calgary, Monday, April 7th, 1913.

MINUTES OF THE ANNUAL MEETING.

The president, Mr. Geo. Lane, in the chair.

The minutes of the last meeting were adopted as read.

The secretary then read the annual report and presented the financial statement.

Moved by Mr. Ruttle, seconded by Mr. R. Von Strallendorf,—

That the annual report and financial statement for the past year be adopted as read.

Moved by Mr. Ruttle, seconded by Mr. Thorburn,—

That Mr. Geo. Lane be appointed to represent this association at the meeting of representatives of live stock associations from the four western provinces, to be held on Thursday next at Calgary. Carried.

Moved by Mr. Tyler, seconded by Mr. Wright,—

That the election of officers be proceeded with by a show of hands. Carried.

ELECTION OF OFFICERS.

The election resulted as follows:

PATRONS.

Hon. G. H. V. Bulyea, Lieutenant-Governor of Alberta.
The Mayor of Calgary.
The Mayor of Edmonton.
The Mayor of Lethbridge.
The Mayor of Medicine Hat.
The Mayor of Wetaskiwin.
The President of the Calgary Industrial Exhibition.
Hon. President.—A. L. Sifton, Premier of Alberta.
President.—Geo. Lane, Calgary.
First Vice-President.—Dr. J. C. Hargrave, Medicine Hat.
Second Vice-President.—John A. Turner, Calgary.
Secretary and Managing Director.—E. L. Richardson, Calgary.

EX-OFFICIO DIRECTORS.

Hon. Duncan Marshall, Minister of Agriculture, Edmonton.
Hon. John Bright, Live Stock Commissioner, Ottawa.

BREED DIRECTORS.

Clydesdales	H. Banister, Davisburg.
Shires	F. Schroeder, Midnapore.
Percherons	W. B. Thorne, Aldersyde.
Thoroughbreds	O. A. Critchley, Cochrane.
Coach Breeds	G. E. Goddard, Cochrane.
Standardbreds	I. G. Ruttle, Calgary.
Ponies	O. E. Brown, Calgary.
Shetland Ponies	D. Thorburn, Davisburg.
Suffolk Punch	Geo. Jaques, Lamerton.
Belgians	C. M. Cohen, Kew.
Heavy Draft	E. D. Adams, Calgary.
Roadsters	A. McKillop, Calgary.
Carriage Horses	D. P. McDonald, Cochrane.
Agricultural Horses	Bryce Wright, De Winton.
Cartage Horses	Fred Johnston, Calgary.
Delivery Classes	N. J. Christie, Calgary.
Saddle Horses	Geo. de Roaldes, Calgary.

BREED DIRECTORS.

G. S. Rosamond, Innisfail.
Geo. Roels, Calgary.
F. Bedingfield, Pekisko.
Alex Galbraith, Edmonton.
Count B. de Charnace, Glenbow.
W. W. Hunter, Olds.
F. C. Lowes, Calgary.
C. R. de la Vergne, Glenbow.
Thos. McMillan, Okotoks.
Duncan Clark, Cluny.

HONORARY DIRECTORS.

W. F. Stevens, Live Stock Commissioner, Edmonton.
Dr. J. G. Rutherford, Supt. of Animal Husbandry, C. P. R., Calgary.
Dr. Tolmie, Live Stock Rept. for the Dominion, Victoria.
Mr. McDonald, Live Stock Commissioner, Victoria.
J. C. Smith, Live Stock Commissioner, Regina.
J. T. Scott, Edmonton.
H. S. Arkell, Asst. Live Stock Commissioner, Ottawa.

The question of the color of the first and second prize ribbons used at the horse show was discussed, and left to the directors to decide what colors should be used at the next show.

Mr. Archie McKillop, Calgary, advised the meeting that he would offer a cup to the value of $100 each year for five years, at the spring horse show, in the Standardbred classes, which offer was very much appreciated by the members present.

The meeting then adjourned.

ANNUAL REPORT OF THE SECRETARY.

GENTLEMEN,—

I beg to submit herewith the fourteenth annual report of the Alberta Horse Breeders' Association, being for the year 1912-13.

The year 1912 was an important one for the Alberta provincial horse show on account of the splendid new horse show building erected by the city of Calgary, and used for the first time for the horse show held April 9th to 12th. The building was a very great convenience to both the visitor and the exhibitor, and made it possible for the show to take a big stride forward. A comparison of the number of entries, the gate receipts and the prizes paid for the past five years is as follows:

	1908	1909	1910	1911	1912
Number of entries ..	90	615	925	960	1035
Gate receipts	no admission charged	$2,008.75	$4,479.70	$4,600.10	$8,789.30
Prizes paid	$444 57	$2,708.86	$3,734.09	$4,648.42	$5,830,55

It will be noticed that the entries increased by 75; the gate receipts increased $4,189.00 over the previous year, and the amount paid out in prizes shows an increase of $1,182.13.

The building was very suitably decorated and the arena was lighted with seventy-two 250 watt lights which made the building almost as satisfactory for judging in the evening as in the afternoon. The show was officially opened on the evening of April 9th by His Honour, Lieutenant-Governor Bulyea, and the awards in the different classes placed by the following judges:

Dr. H. B. Medd, Victoria, B. C., Thoroughbreds, Saddle and Hunters; Alex Galbraith, De Kalb, Ill., Clydes, Shires and Purebred Hackneys; W. L. Carlyle, Moscow, Idaho, Percherons, Belgians and Suffolk Punch; Andrew Laidlaw, Spokane, Wash., Standardbred and Coach, Purebred classes, Roadsters and Carriage Horses; W. J. Clements of Vancouver acted as ringmaster; and E. C. Hallman of Alsask, Sask., acted as Live Stock Superintendent.

As usual the afternoon set aside particularly for school children was a success, being thoroughly enjoyed by a very large number of children, who will be the exhibitors and competitors of the horse show in the near future.

The general improvement from year to year in the quality of the exhibits is most satisfactory. One cannot help but be surprised at the development when comparing the show of 1912 with the show of three or four years ago. It is hoped that the co-operation of the exhibitors together with the splendid natural advantages of the province of Alberta for horse raising will continue to make it possible to show as much improvement in the future as in the past, and that the citizens of Calgary as well as from various parts of the province will continue to patronize the show so that it may be a success financially.

REDUCTION IN FREIGHT RATES.

During the year the executive committee of the live stock associations met Mr. A. Price, general superintendent of the C. P. R., and H. C. McMullen, general live stock agent, requesting that the weight of stallion foals shipped by rail should be reduced from 4000 to 2000 lbs. A request was made for arrangements whereby shippers of purebred stock may be able to complete a carload at various points en route, and to unload at various stations by paying the through carload rate and $3 for the first stop and $2 for subsequent stops. They are pleased to be able to report that both of these requests have been complied with, and are now included in the C. P. R. Tariff No. W 2676. A shipper of purebred stock may therefore now bill a carload of purebred horses at half rate from, say, Calgary to Red Deer, and has the privilege of unloading one or more animals at, say, Didsbury for $3 extra, and at Innisfail for $2 extra. Previously it would be necessary to bill the animals to Didsbury and to Innisfail in less than carload shipments from Calgary to these points, although the shipper may have been sending part of a carload through to Red Deer at the same time.

LIVE STOCK SHIPPING REGULATIONS.

Your committee appointed to meet similar committees from the other associations in regard to the proposed live stock shipping regulations, held a meeting during the year, and beg to report that each time the regulations are gone over, the provisions in same are made more equitable between the shippers and the railway companies. Another meeting is to be held at which it is hoped arrangements will be completed for the adoption of these regulations.

Regarding the proposed new live stock shipping contract which has been under consideration by the live stock representatives of Canada, I understand that it has not been possible to come to a satisfactory adjustment with the various railway companies, and that the matter will, therefore, be submitted to the Railway Commission for settlement.

RANCH COMMISSION.

During the year the Ranch Commission appointed by the Dominion government held meetings throughout the province and the undersigned as secretary of the Alberta live stock associations, assisted in securing representative meetings. It is hoped that the report of the commission will be such as to place ranching interests generally on a more satisfactory basis.

MIXED FARMING.

The general sentiment towards mixed farming and live stock breeding in Alberta which has been rapidly gaining in strength, particularly during last year, is most encouraging. The cheap grain, and in some cases the frosted grain have been unfortunate but seemingly necessary lessons in the way of turning the attention of farmers from straight grain growing to mixed farming and stock raising. It is hoped that the residents of the province will go more extensively into stock raising as rapidly as their finances will permit.

You will at this meeting be asked to appoint a representative to attend the joint meeting of similar representatives from the horse, cattle, sheep and swine breeders' associations of Manitoba, Saskatchewan, Alberta and British Columbia, which will meet in Calgary on Friday of this week to discuss the question of western representation on the boards of breed societies having their head offices in eastern Canada, also matters connected with the international records, and other questions which the western live stock associations are of the opinion should be taken up in order to properly look after the live stock interests of western Canada.

I attach hereto a copy of the financial statement for the year 1912, and am pleased to report a balance on hand of $1,054.56 which is an increase of $245.36 over the balance on hand last year, although the amount paid in prizes increased over $1,000, and there was a general increase in the expenses of the show consequent upon its development. The statement has been audited and certified to by Mr. James B. Sutherland, chartered accountant of Messrs Webb, Read & Hegan, Calgary.

FINANCIAL STATEMENT FOR THE YEAR ENDING DECEMBER 31st, 1912.

Income 1912.

Gate Receipts	$ 8758.80	
Alberta Government Grant	2000.00	
Dominion Government Grant	216.67	
Donations	1055.00	
Entry Fees	1281.00	
Advertising	265.00	
Membership Fees	230.00	
Sundries	92.90	
Total Receipts 1912		$13899.37

Expenditure 1912.

Prizes	$ 5696.75	
Judges, officials, music, lighting, decorations, wages, heating, lumber, straw, hardware, teaming and general grounds expense	5443.16	
Postage, stationery, manager's salary, help in office and general office expense	1589.28	
Printing and advertising	924.82	
Total expenditure 1912		$13654.01
Excess of receipts over expenditures 1912		245.36
Balance from 1911 brought forward		809.20
Balance on hand		$ 1054.56

Calgary, 10th March, 1913; audited and found correct,

(*Sgd.*) JAMES B. SUTHERLAND, Chartered Accountant, *Auditor.*

Following is a list of prize winners at the horse show of 1912:

LIGHT HORSES.

Thoroughbred stallion, 4 years or over.

1st	Sinbad	David Smith, Carbon.
2nd	Wallaby	D. P McDonald, Cochrane.
3rd	Gallant	J. H. Wilson, Grenfell, Sask.

Stallion, 3 years old.

1st	Ben Ara	J. C. C. Bremner, Clover Bar.

Mare, 4 years or over.

1st	Ayrwater	Murray Hendrie, High River.
2nd	Miss Alva Scott	Reed & Mayer, Calgary.
3rd	Reevia	M. J. Carr, Calgary.

Mare, 3 years old.

1st	Elsie Hart	Reed & Mayer, Calgary.
2nd	Winnie Wells	C. E. Wilkinson, Millarville.
3rd	Alberta	Caldwell & Hunter.

Mare, 2 years old.

1st	Cyclamont	David Smith, Carbon.
2nd	Revel	M. J. Carr, Calgary.

Stallion, 3 years old and upwards, suitable for getting saddle horses and hunters.

1st	Sinbad	David Smith, Carbon.
2nd	Wallaby	D. P. McDonald, Cochrane.

Champion Thoroughbred stallion.

Sinbad	David Smith, Carbon.
Reserve: Ben Ara	J. C. Bremner, Clover Bar.

Champion Thoroughbred female.

Ayrwater	Murray Hendrie, High River.
Reserve: Cyclamont	David Smith, Carbon.

Three, purebred or grade, any age or sex, bred in Alberta, the progeny of one registered sire.

1st	Three progeny of Wallaby	D. P. McDonald, Cochrane.
2nd	Chalcedony, Chancellor and Carburetor	W. H. Cochrane.

STANDARDBREDS.

Pacing stallion, 4 years old or over, to be shown in harness to a bike cart.

1st	I. G. Ruttle	Geo. T. Haag, Calgary.
2nd	Alberta Boy	Louden & Powell, Calgary.
3rd	M. S. McCarthy	Geo. T. Haag, Calgary.

Trotting stallion, 4 years or over, to be shown in harness to a bike cart.

1st	W. H. S.	Geo. T. Haag, Calgary.
2nd	Glen Winters	W. J. Halliday, Calgary.
3rd	General Bryson	J. E. Shultz, Pincher Creek.

Standardbred stallion, 3 years old.

1st	Prince Pong	J. R. Sutherland, Calgary.
2nd	Alberta Pride	J. A McDonald, Calgary.
3rd	Ambassador Todd	A. Robbins, Laura, Sask.

Stallion, 2 years.

Chestermere Wicks	J. A. McCullough, Calgary.

Mare, 4 years or over.

1st	Hydrangea	Wm. Parslow, Calgary.
2nd	Laura Lobarti	F. W. Ings, Nanton.
3rd	Inez McGregor	Miss Jessie McVeigh, Calgary

Mare, 3 years.

1st	Countess Peter	John Daly, Granum.
2nd	Chestermere Queen	J. A. McCullough, Calgary.

Mare, 2 years.

1st	Mainchief	H. B. Somerville, Calgary.
2nd	Alba McGregor	F. H. McLean, Calgary.

Mare and two of her progeny.

1st	Marjorie Fairthorn	J. R Sutherland, Calgary.
2nd	Chestermere Princess	J. A. McCullough, Calgary.

Champion Standardbred stallion.

Prince Pong	J. R. Sutherland, Calgary.
Reserve: W. H. S.	Geo. T Haag, Calgary.

Champion Standardbred female.

Mainchief	H. B. Somerville, Calgary.
Reserve: Marjorie Fairthorn	J. R. Sutherland, Calgary.

HACKNEYS (REGISTERED.)

Stallion, 4 years or over.

1st	Le Roi	John Weir, Carbon.
2nd	Devondale	C. E. Spinks.
3rd	Scoreby Gentleman	G. S. Rosamond, Innisfail.
4th	Merodak	W. Moodie, De Winton.

Pony Hackney (Special.)

1st	Sir Bancock	Ben Finlayson, Claresholm.

Stallion, any age, shown to harness to an appropriate vehicle.

1st	Le Roi	John Weir, Carbon.
2nd	Sir Bancock	Ben Finlayson, Claresholm.
3rd	Woodlands Sensation	J. J. Richards, Red Deer.

Stallion, 3 years.

1st	Marshall Rosador	Robt. M. Sheffield, Sedgewick.
2nd	Lord Lyon	Wm. Moodie, De Winton.

Stallion, 2 years.

1st	Senior Deacon	John Weir, Carbon.

Stallion, foaled in 1911.

1st	Fireboot	R. W. Trotter, Glenbow.

Mare, 4 years or over.

1st	Lady Tuck	F. C. Lowes, Calgary.
2nd	Lady Western	R. W. Trotter, Calgary.
3rd	Fame	R. W. Trotter, Calgary.

Mare, 3 years.

1st	White Silk	R. W. Trotter, Calgary.
2nd	Moss Rose	Geo. Spence, Cremona.

Mare, 2 years.

1st		J. J. Richards, Red Deer.
2nd	Wild Rose	George Spence, Cremona.
3rd	Wildfern	R. W. Trotter, Glenbow.

Filly, foaled in 1911.

1st	Redbriar	R. W. Trotter, Glenbow.
2nd	Terrington Lily 2nd	R. W. Trotter, Glenbow.

Mare and two of her progeny bred in Canada.

1st	Fimber Pride	R. W. Trotter, Glenbow.
2nd		J. J. Richards, Red Deer.

Special—Three progeny of one registered sire.

1st The Mallard....................R. W. Trotter, Glenbow.
2nd White Silk....................R. W. Trotter, Glenbow.

Champion Hackney stallion.

Le Roi..............................John Weir, Carbon.
Reserve: Sir Bancock............Ben Finlayson, Claresholm.

Champion Hackney female.

Lady Tuck..........................F. C. Lowes, Calgary.

COACH BREEDS (REGISTERED.)

Coach stallion, 4 years or over.

1st Fra Diavolo....................G. E. Goddard, Cochrane.
2nd Maxime, 12....................G. E. Goddard, Cochrane.

Stallion, any age, shown in harness to an appropriate vehicle.

1st Fra Diavolo....................G. E Goddard, Cochrane.
2nd Maxime, 12....................G. E. Goddard, Cochrane.

Mare, 4 years or over.

1st Mimi ....G. E. Goddard, Cochrane.

Three (purebred or grade, any age or sex) bred in Alberta, progeny of one registered sire.

1st Three progeny of Maxime.....G. E. Goddard, Cochrane.
2nd Three progeny of Napoleon...D. P. McDonald, Cochrane.

LIGHT GRADE FOALS.

Light Grade foal of either sex, foaled in 1911, sired by registered light stallion.

1st Lizzie Waters.................W. M. Parslow, Calgary.
2nd Carburettor...................W. H. Cochrane, Millarville.

SHETLAND PONIES.

Shetland stallion over 1 year.

1st Sunshine.......................Herald Publishing Co., Calgary.
2nd Peter Pan.....................Herald Publishing Co., Calgary.

Shetland mare over 1 year.

1st Florence.......................Mrs. H. Minchin, Calgary.

Shetland foal of 1911.

1st	Foal of Florence	Mrs. H. Minchin, Calgary.

II.—HEAVY HORSES.

CLYDESDALES.

Stallion, 5 *years or over.*

1st	Dunure Pebble	John Sandilands, De Winton.
2nd	Mainspring	J. & D. Clark, Crowfoot.
3rd	Baron Leith	C. F. Lyall, Strome.
4th	Mascarille	John Graham, Carberry, Man.
5th	Pride of Lindsay	Geo. Spence, Cremona.

Stallion, 4 *years.*

1st	Royal Diadem	John A. Turner, Calgary.
2nd	Dunoon	G. O'Brien, Calgary.
3rd	King's Counsel	Rowland Ness, De Winton.
4th	McGregor's Chief	Rowland Ness, De Winton.

Stallion, 3 *years.*

1st	Slogarie	Geo. O'Brien, Calgary.
2nd	Yokohama	J. & Duncan Clark, Crowfoot.
3rd	Bogdavie	John A. Turner, Calgary.
4th	Hopeful of Silversprings	John Graham, Carberry, Man.
5th	Royal Renown	H. M. Lusk, Okotoks.

Stallion, 2 *years.*

1st	Dunure Relic	John A. Turner, Calgary.
2nd	Scottish Crown	John A Turner, Calgary.
3rd	Alberta Chief	A. L. Dollar, High River.
4th	Alberta Sentinel	A. L. Dollar, High River.
5th	Alberta Prince	A. L. Dollar, High River.

Stallion foaled in 1911.

1st	Donald Norton of Crowfoot	John Clark, Jr., Gleichen.
2nd	Oakburn's Heir	A D. Shore, Gleichen.
3rd	Dunure Jack	Geo. O'Brien, Calgary.

Stallion, 2 *years or under, bred in Canada.*

1st	Donald Norton of Crowfoot	John Clark, Jr., Gleichen.
2nd	Oakburn's Heir	A D. Shore, Gleichen.
3rd	Gay Boy	J. & D. Clark, Crowfoot.
4th	Bob Shirley	J. W. Hayes, Calgary.

Stallion, over 2 *years, bred in Canada.*

1st	Pride of Lindsay	Geo. Spence, Cremona
2nd	Baron of Moosomin	W. H. Croxford, Airdrie.
3rd	Diplomat	Wm. Moodie, De Winton.

Mare, 4 years or over.

1st	Poppy	John A. Turner, Calgary.
2nd	Sweet Barlae	Bryce Wright, De Winton.
3rd	Georgina Murray	Geo. O'Brien, Calgary.
4th	Tootsie	John Brennan, Calgary.

Mare, 3 years.

1st	Iron Duchess	John Clark, Jr., Gleichen.
2nd	Dolly Acme	John Clark, Jr., Gleichen.
3rd	Jess of Craigwillie	Arthur Norman, Springbank.
4th	College Queen	Geo. O'Brien, Calgary.
5th	May MacQueen	J. & D. Clark, Crowfoot.

Filly, 2 years.

1st	Ruby Baroness	John A. Turner, Calgary.
2nd	Nettie of Pinkiln	The Shaw Farm, Okotoks.
3rd	Dolly D	J. W. Hayes, Calgary.

Filly foaled in 1911.

1st	Prince Elcho	D. Thorburn, De Winton.
2nd	Freda	Geo. O'Brien, Calgary.

CLYDESDALE SPECIAL.

Three (purebred or grade, any age or sex) bred in Alberta, the progeny of one registered sire.

1st	J. & D. Clark, Crowfoot.

Champion Clydesdale stallion.

Royal Diadem	John A. Turner, Calgary.
Reserve: Dunure Pebble	John Sandilands.

Champion Clyde female.

Poppy	John A. Turner, Calgary.
Reserve	Bryce Wright, Calgary.

Champion Canadian bred Clyde stallion.

Pride of Lindsay	Geo. Spence, Cremona.
Reserve: D. Norton of Crowfoot	John Clark, Gleichen.

Champion Canadian bred Clyde female.

Sweet Barlae	Bryce Wright, De Winton.
Reserve: Dolly Acme	John Clark, Gleichen.

Best team of draft mares or geldings, sired by registered Clydesdale stallion.

1st	Bill and Dick	John Clark, Jr., Gleichen.
2nd	Frank and Tom	J. & D. Clark, Crowfoot.

Best single draft mare or gelding, sired by registered Clydesdale stallion.

1st	Poppy	John A. Turner, Calgary.
2nd	Frank	J. & D. Clark, Crowfoot.
3rd	Bill	John Clark, Jr., Gleichen.

SHIRES.

Shire stallion, 4 years or over.

1st	Lambton Fashion	John Graham, Carberry, Man.
2nd	Acle Harold	F. Schroeder, Midnapore.
3rd	Hempstead Champion	F. Schroeder, Midnapore.
4th	Norley P. H. 2nd	F. A. McHugh & Sons, Calgary.

Shire stallion, 3 years.

1st	Intake Coronation	Bradford & Lee, High River.
2nd	Armourer	S. Walker, Calgary.

Shire mare, 4 years or over.

1st	Carlton Alberta	Stuart Walker.
2nd	Juno of Holdenby	Murray Hendrie, High River.

Champion Shire stallion.

Lambton Fashion	John Graham, Carberry.

Champion Shire female.

Carlton Alberta	Stuart Walker, Calgary.
Reserve: Juno of Holdenby	Murray Hendrie, High River.

PERCHERONS.

Stallion, 5 years or over.

1st	Harmoniste	W. W. Hunter, Olds.
2nd	Pinson	Geo. Lane, Calgary.
3rd	Henner	Washington Alberta Land Co., Crossfield.
4th	Quality	Watts & Porter, Calgary.
5th	Gaulois	W. W. Hunter, Olds.

Stallion, 4 years.

1st	Illico	W. B. Thorne, Aldersyde.
2nd	Initute	G. Lane & Gordon, Ironsides & Fares.
3rd	Craft	W. E. and R. C. Upper, Calgary.

Stallion, 3 years.

1st	Joeuf	W. W. Hunter, Olds.
2nd	Hadrian	Watts & Porter, Calgary.
3rd	Regulateur	Watts & Porter, Calgary.
4th	Jacquet	W. W. Hunter, Olds.
5th	Rex	Watts & Porter.

Stallion, 2 years.

1st	Kanot	W. W. Hunter, Olds.
2nd	Kina	W. W. Hunter, Olds.
3rd	Glenbow Gratis	C. R. de la Vergne, Glenbow.

Stallion, foaled in 1911.

1st	Trump	W. B. Thorne.

Stallion, 2 years or under, bred in Canada.

1st	Figaro	G. Lane & Gordon, Ironsides & Fares.
2nd	Hercules	W. E. & R. C. Upper, Calgary.
3rd	Fearless	G. Lane & Gordon, Ironsides & Fares.
4th	Forrester	G. Lane & Gordon Ironsides & Fares

Stallion over 2 years, bred in Canada.

1st	Romeo	W. E. & R. C. Upper, Calgary.

Mare, 4 years or over.

1st	Irenee	W. W. Hunter, Olds.
2nd	Flaquer	W. G. Knyvett, Strathmore.

Mare, 3 years.

1st	Jardoniere	Geo. Lane, Bassano.

Filly, 2 years.

1st	Komete	W. W. Hunter, Olds.
2nd	Kara	Washington Alberta Land Co., Crossfield.
3rd	Kilmaine	Washington Alberta Land Co., Crossfield.

Filly foaled in 1911.

1st	Flip	W. B. Thorne, Aldersyde.

Three (purebred or grade, and age or sex) bred in Alberta, the progeny of one registered sire.

1st	Figaro, Fearless, Forrester	G. Lane & Gordon, Ironsides & Fares, Pekisko.

Champion Percheron Stallion.

	Illico	W. B. Thorne.
Reserve:	Initute	G. Lane & Gordon, Ironsides & Fares, Pekisko.

Champion Percheron female.

	Irenee	W. W. Hunter, Olds.
Reserve:	Jardoniere	G. Lane & Gordon, Ironsides & Fares.

Champion Canadian bred Percheron stallion, any age.

	Figaro	G. Lane & Gordon, Ironsides & Fares,
Reserve:	Hercules	W. E. & R. C. Upper.

Champion Canadian bred Percheron filly, 1 year old.

Illico	W. B. Thorne, Aldersyde.

BELGIANS.

Stallion, 4 years or over.

1st	Caesar de Machelen	Thurston Culshaw & Sons, Lougheed.
2nd	Robert de Lindbuick	Alfonse Haazen, Regina.
3rd	Moachon de Gradolise	Alfonse Haazen, Regina.

Stallion, 3 years.

1st	Borege	Alfonse Haazen, Regina.
2nd	Lauriat	Alfonse Haazen, Regina.
3rd	Renome	Alfonse Haazen, Regina.

Belgian mare, 4 years or over.

1st	Suzanne de Holder	Alfonse Haazen, Regina.
2nd	Julie de Luluing	Alfonse Haazen, Regina.
3rd	Rosia	Alfonse Haazen, Regina.

Mare, 2 years.

1st	Bertha Salmon	Alfonse Haazen, Regina.

Champion Belgian stallion.

Caesar de Machelen	Thurston Culshaw & Sons, Lougheed.

Champion Belgian female, any age.

Suzanne de Holder	Alfonse Haazen, Regina.

SUFFOLK PUNCH.

Stallion, 4 years or over.

1st	Morston Gay Monarch	Archie Jaques, Alix.
2nd	Morston Samson	Baker & Hunt, Fort Saskatchewan.
3rd	Sproughton Marquis	F. J. Hartell, Cheadle.
4th	Sudbourne Minstrel	Baker & Hunt, Fort Saskatchewan.

Stallion, 3 years.

1st	Trimley Prince	Baker & Hunt, Fort Saskatchewan.

Stallion, 2 years.

1st	Alberta Robin	Archie Jaques, Alix.

Mare, 4 years or over.

1st	Sudbourne Queen of Spades	Baker & Hunt, Fort Saskatchewan.

Champion Suffolk stallion, any age.

Morston Gay Monarch	Archie Jacques, Alix.
Reserve: Trimley Prince	Baker & Hunt, Fort Saskatchewan.

Champion Suffolk female, any age.

Sudbourne Queen of Spades	Baker & Hunt.

HEAVY GRADE FOALS.

Grade foals of either sex, foaled in 1911, sired by a registered heavy draft stallion.

1st	Bay, Filly	E. D. Adams, Calgary.
2nd	Dan	D. Thorburn, De Winton.

Heavy 4 horse team, Clydesdale, Shires, purebred or their grades or crosses, each horse to weigh 1300 lbs. and over.

1st		James & Duncan Clark, Crowfoot.
2nd		Malcolm McConnell, Calgary.

Team in harness only, each horse to weigh 1500 lbs. or over.

1st	Frank and Tom	Jas. & Duncan Clark, Crowfoot.
2nd	Bill and Dick	John Clark, Jr., Gleichen.
3rd		The Pacific Cartage Co.
4th	Bell and Jennie	Malcolm McConnell, Calgary.

Team in harness, each horse to weigh under 1500 lbs. but over 1300.

1st	Princess MacQueen and May MacQueen	J. & D. Clark, Crowfoot.
2nd		The Pacific Cartage Co., Calgary.
3rd	Iron Duchess & Dolly Acme	John Clark, Jr., Gleichen.
4th	Pat and Mike	D. Thorburn, De Winton.

Draught mare or gelding, 1500 lbs. or over.

1st	Frank	J. & D. Clark, Crowfoot.
2nd	Bill	John Clark, Jr., Gleichen.
3rd	Sweet Barlae	Bryce Wright, De Winton.

Draught mare or gelding under 1500 lbs. but not less than 1300.

1st	Iron Duchess	John Clark, Jr., Gleichen.
2nd	Princess MacQueen	J. & D. Clark, Crowfoot.
3rd		The Pacific Cartage Co., Calgary.

Pair of grade horses, mares or geldings, 4 years old and not more than 7.

1st	Bill and Dick	John Clark, Jr., Gleichen.

Heavy draught grade team to be shown in harness only.

1st	Frank and Tom	J. & D. Clark, Crowfoot.
2nd	Bill and Dick	John Clark, Jr., Gleichen.
3rd	Bay Geldings	The Pacific Cartage Co., Calgary.

Heavy Draught grade mare or gelding.

1st	Frank	J. & D. Clark, Crowfoot.
2nd	Tom	J. & D. Clark, Crowfoot.
3rd	Bay Gelding	The Pacific Cartage Co.

Mare or gelding over 15.1 hands.

1st	Dan Mathews	Geo. T. Haag, Calgary.
2nd	Brown Mack	National Land Co., Calgary.
3rd	Topsy	C. H. Griffith, Calgary.
4th	Royal Scion	G. S. Rosamond, Innisfail.

Mare or gelding 15.1 hands or under.

1st	Neda	Dr. Sisley, Calgary.
2nd	Lady Jane	Edwin Auld & Son, Edmonton.
3rd	Laura Lobasti	F. W. Ings, Nanton.
4th	Dime	Chas. Riddock, Calgary.

Pair of trotting mares or geldings, 3 years old or over.

1st	Winona Wiggins & Jack	I. G. Ruttle & Co., Calgary.
2nd	Brown Mack & Dan Mathews	National Land Co., Calgary.
3rd	Ethel Fames & Rythm	Edwin Auld & Son, Edmonton.
4th	Countess Peter and Mate	John Daly, Granum.

Single trotting mare or gelding, 3 years old and over.

1st	Neda	Dr. Sisley, Calgary.
2nd	Lady Jane	Edwin Auld & Son, Edmonton.
3rd	Dime	Chas. Riddock, Calgary.
4th	The Kid	L. A. Scott, Calgary.

Single trotting, mare or gelding, 3 years old and over.

1st	Dan Mathews	Geo. T. Haag, Calgary.
2nd	Brown Mack	National Land Co., Calgary.
3rd	George	J. F. Ruttle, Calgary.
4th	Jim	Malcolm McConnel, Calgary.

Pair of pacing mares or geldings, 3 years old and over.

1st	Lamona and Elsie	I. G. Ruttle, Calgary.
2nd	Bess M. and Kid	J. E. Moffatt, Claresholm.
3rd	Minnie H. and Mate	A. E. Hunter, Claresholm.

Single pacing mare or gelding, 3 years or over.

1st	Lamona	I. G. Ruttle, Calgary.
2nd	Topsy M	C. H. Griffiths, Calgary.
3rd	Dolly Keswick	C. E. Gigot, High River.

Team of drivers, mares or geldings.

1st	Bess M. and Kid	J. E. Moffatt, Claresholm.
2nd	Minnie H. and Mate	A. E. Hunter, Claresholm.

Single driver, mare or gelding.

1st	Countess Peter	John Daly, Granum.
2nd	Laura Lobasti	F. W. Ings, Nanton.
3rd	Bess M	J. E. Moffatt, Claresholm.

CARRIAGE, COACH AND HACKNEY HORSES.

Pair of Mares or geldings over 14.2 *but not exceeding* 15.1

1st	King Storm & Lord Tuck	F. C. Lowes, Calgary.
2nd	Going Some and So Am I	F. C. Lowes, Calgary.
3rd	Glenbow and Glenarrow	C. R. de la Vergne, Glenbow.

Pair of mares or geldings over 15.1.

1st	Koh-i-noor and Durbar	F. C. Lowes, Calgary.
2nd	Lou and Bill	J. W. McElroy, Calgary.

Mare or gelding over 14.2 *hands and not exceeding* 15.1.

1st	King Storm	F. C. Lowes, Calgary.
2nd	Lord Tuck	F. C. Lowes, Calgary.
3rd	Going Some	F. C. Lowes, Calgary.
4th	Millarville Top Notch	R. Von Strallendorf, Millarville.

Mare or gelding over 15.1 *but not over* 15.3.

1st	Lady Tuck	F. C. Lowes, Calgary.
2nd	Koh-i-noor	F. C. Lowes, Calgary.
3rd	Lady Primrose	Crist Bros., Calgary.
4th	Lady Grosvenor	Adams & de Roaldes, Calgary.

Mare or gelding over 15.3.

1st	Durbar	F. C. Lowes, Calgary.
2nd	Cromwell	F. C. Lowes, Calgary.
3rd	Bill	Adams & de Roaldes, Calgary.
4th	The Mallard	R. W. Trotter, Glenbow.

Mare or gelding, over 15.1 *hands.*

1st	Koh-i-noor	F. C. Lowes, Calgary.
2nd	Bill	Adams & de Roaldes, Calgary.
3rd	Lady Primrose	Crist Bros., Calgary.
4th	Lou	J. W. McElroy, Calgary.

Mare or gelding, 15.1 *hands or under.*

1st	King Storm	F. C. Lowes, Calgary.
2nd	Going Some	F. C. Lowes, Calgary.
3rd	Beta	Robt. Blyth, Medicine Hat.
4th	Red Fox	H. T. Sheffield, Calgary.

Mare or gelding 14.3 *and not exceeding* 15.2.

1st	So Am I	F. C. Lowes, Calgary.
2nd	King Storm	F. C. Lowes, Calgary.
3rd	Lou	J. W. McElroy, Calgary.
4th	Beta	Robt. Blyth, Medicine Hat.

High Stepper, mare or gelding.

1st	Lady Tuck	F. C. Lowes, Calgary.
2nd	Durbar	F. C. Lowes, Calgary.
3rd	Going Some	F. C. Lowes, Calgary.
4th	Lady Grosvenor	Adams & de Roaldes, Calgary.

Pair of High Steppers, mares or geldings, 14.2 *and over.*

1st	Koh-i-noor and Durbar	F. C. Lowes, Calgary.
2nd	Going Some and So Am I	F. C. Lowes, Calgary.
3rd	Lord Tuck and King Storm	F. C. Lowes, Calgary.
4th	Lou and Bill	J. W. McElroy, Calgary.

Team of drivers, mares or geldings, residents of cities barred.

1st	Lou and Bill	J. W. McElroy, Calgary.
2nd	Geraldine and Red Wing	G. E. Goddard, Cochrane.
3rd	Rob and Roy	J. H. Clark, Glenbow.

Single driver, mare or gelding, residents of cities barred.

1st	Lou	J. W. McElroy, Calgary.
2nd	Millarville Top Notch	R. Von Strallendorf, Millarville.
3rd	Daphne	G. E. Goddard, Cochrane.

PONIES IN HARNESS.

Pony, mare or gelding, 14.2 *hands, but over* 13.2.

1st	Spray	O. E. Brown, Calgary.
2nd	Ginger	Russell H. Turner, Calgary.
3rd	Modesty	M. J. Carr, Calgary.
4th	Satan	W. J. Nolan, Calgary.

Pony, mare or gelding, other than Shetland.

1st	Kit Cox	Edwin Auld & Son, Edmonton.
2nd	Ladysmith	Dawson Turner, Calgary.
3rd	Bonnie	A. McWillians, Calgary.

Pair of Ponies, mares or geldings, 14.2 *and under, but over* 13.2.

1st	Sam and Satan	W. J. Nolan, Calgary.

Pair of Shetland Ponies, stallions, mares or geldings.

1st	Buster and Sis	Mrs. H. Minchin, Calgary.

TANDEMS, FOUR-IN-HAND AND COMBINATION CLASSES.

Tandems, mares or geldings, 14.2 *hands and over.*

1st	Going Some and So Am I	F. C. Lowes, Calgary.
2nd	Lord Tuck and King Storm	F. C. Lowes, Calgary.

Tandems, mares or geldings, 15.1 *hands or over.*

1st	Koh-i-noor	F. C. Lowes, Calgary.
2nd		Adams & de Roaldes, Calgary.

Four-in-hand, 15 *hands and over.*

1st		I. G. Ruttle, Calgary.

Combination Pony, 14.2 *and under.*

1st	Spray	O. E. Brown, Calgary.
2nd	Ginger	R. H. Turner, Calgary.
3rd	Jackie	Malcolm Millar, Millarville.
4th	Modesty	M. J. Carr, Calgary.

Combination horse, mare or gelding, 15.1 *and under, but over* 14.2.

1st	So Am I	F. C. Lowes, Calgary.
2nd	Lady Beaverdam	R. Von Strallendorf, Millarville.
3rd	Leah	M. J. Carr, Calgary.
4th	Jock	J. H. Clark, Glenbow.

Combination horse, mare or gelding, over 15.1.

1st	Katy Did	F. C. Lowes, Calgary.
2nd	Cadet	F. C. Lowes, Calgary.
3rd	Poppy	G. E. Goddard, Cochrane.
4th	Daphne	G. E. Goddard, Cochrane.

SPECIALS FOR BOYS AND GIRLS.

Saddle pony, 14.2 *hands and under, but over* 13.2.

1st		Marjorie Osborne, Calgary.
2nd		M. J. Carr, Calgary.
3rd	Ginger	Russell Turner, Calgary.
4th		John Welsh, Calgary.

Saddle pony, other than Shetland, 13.2 *or under.*

1st		Miss Margaret McDonald, Cochrane.
2nd		H. McC. Williams, Calgary.
3rd		Dawson Turner, Calgary.
4th		Miss Margaret McKay, Calgary.

Pony other than Shetland, 14.2 *or under.*

1st		Edwin Auld & Sons, Edmonton.
2nd		Russel H. Turner, Calgary.
3rd		Malcolm T. Millar, Millarville.
4th		Margaret McDonald, Cochrane.

Shetland pony to be ridden by a boy or girl under 15 *years.*

1st		Geo. Hoadley, Okotoks.
2nd		Stanley Slater, Calgary.
3rd		Mrs. H. Minchin, Calgary.

Shetland pony to be driven by boy or girl under 15 *years.*

1st		Stanley Slater, Calgary.
2nd		Mrs. H. Minchin, Calgary.
3rd		Horace Underwood, Calgary.

SADDLE CLASSES.

Filly or gelding, 2 years, suitable for saddle purposes.

1st	Wild Rose	Geo. Spence, Cremona.
2nd	Fay	D. P. McDonald, Cochrane.
3rd	Revel	M. J. Carr, Calgary.

Filly or gelding, 1 year, suitable for saddle purposes.

1st	Corona	Robt. Lake, Calgary.
2nd	Carburetor	W. H. Cochrane, Millarville.
3rd	Rex	Robt. Lake, Calgary.

Saddle horse, 14.2 hands or over.

1st	Plume	Mrs. F. R. Harcourt, Calgary.
2nd	Preston	Geo. D. Ruttle, Calgary.
3rd	Sultan	F. R. Harcourt, Calgary.

Mare or gelding under 15.2 hands but over 14.2.

1st	Tobie	Adams & de Roaldes, Calgary.
2nd	Sioux	Adams & de Roaldes, Calgary.
3rd	Kelly	Mr. Saunders, Calgary.

Mare or gelding, 15.2 hands and over, 4 years and over.

1st	Please	Geo. Roels, Calgary.
2nd	Royal Anjou	Count B. de Charnace, Calgary.
3rd	Sailor	Geo. Roels, Calgary.
4th	Dainty	G. E. Goddard, Cochrane.

Mare or gelding over 15.1 hands.

1st	Katy Did	F. C. Lowes, Calgary.
2nd	Why Not	Adams & de Roaldes, Calgary.
3rd	Cadet	F. C. Lowes, Calgary.
4th	Poppy	G. E. Goddard, Cochrane.

Mare or gelding, 14.2 hands and over but not exceeding 15.1.

1st	Game Cock	R. Von Strallendorf, Millarville.
2nd	So Am I	F. C. Lowes, Calgary.
3rd	Lady Beaverdam	R. Von Strallendorf, Millarville.
4th	Tony	H. N. Shepard, High River.

Park hack, mare or gelding, exceeding 14.2.

1st	Katy Did	F. C. Lowes, Calgary.
2nd	Cadet	F. C. Lowes, Calgary.
3rd	Mytea	D. V. Sanders, Cochrane.
4th	Glen Arrow	C. R. de la Vergne, Glenbow.

Ladies' saddle horse, mare or gelding, 15.1 hands and under.

1st	Game Cock	R. Von Strallendorf, Millarville.
2nd	Robin Hood	Mrs. C. Gardner.
3rd	Lady Beaverdam	R. Von Strallendorf, Millarville.
4th	Leah	M. J. Carr, Calgary.

Ladies' Saddle Horse, mare or gelding, over 15.1 hands.

1st	Katy Did	F. C. Lowes, Calgary.
2nd	Sailor	Geo. Roels, Calgary.
3rd	Please	Geo. Roels, Calgary.
4th	Why Not	Adams & de Roaldes, Calgary.

Military Remount, mare or gelding.

1st	Mira	R. F. May, Elbow River.
2nd	Star	R. Young, Springbank.
3rd	Johnnie	David Simpson, Elbow River.

Light weight Polo Pony or pony suitable for polo.

1st	Valley King	Murray Hendrie, High River.
2nd	Beauty	K. J. Snowden, Pekisko.
3rd	First Principle	O. E. Brown, Calgary.
4th	Tom Tit	O. Critchley, Cochrane.

Heavy weight polo pony.

1st	Sparks	Edmund Thomas, Calgary.
2nd	Eagle	Frank McHugh, Calgary.
3rd	Tony	H. N. Shepard, High River.
4th	Grey Dawn	O. Critchley, Cochrane.

Grand Champion saddle horse.

Katy Did	F. C. Lowes & Co., Calgary.
Reserve: Game Cock	R. Von Strallendorf, Millarville.

HUNTERS AND JUMPERS.

Hunter, mare or gelding, to be ridden over 4 jumps.

1st	Sioux	Adams & de Roadles, Calgary.
2nd	Sailor	Geo. Roels, Calgary.
3rd	Please	Geo. Roels, Calgary.
4th	Rainbow	C. Gardner, Calgary.

Hunter, mare or gelding, 14.2 hands and under.

1st	Calgary Lass	F. C. Lowes & Co.
2nd	Cantata	R. Von Strallendorf, Millarville.
3rd	Modesty	M. J. Carr, Calgary.
4th	Marksman	Murray Hendrie, High River.

Hunter, mare or gelding, over 14.2.

1st	Sailor	Geo. Roels, Calgary.
2nd	Tobie	Adams & de Roaldes, Calgary.
3rd	Paddy	F. C. Lowes & Co., Calgary.
4th	Please	Geo. Roels, Calgary .

High Jump, mare or gelding, ladies to ride.

1st	Smokey	D. P. McDonald, Cochrane.
2nd	Please	Geo. Roels, Calgary.
3rd	Sioux	Adams & de Roaldes, Calgary.

High Jump, mare or gelding, 14.2 hands and under.

1st	Calgary Lass	R. Von Strallendorf, Millarville.
2nd	Marksman	Murray Hendrie, High River.
3rd	Cantata	R. Von Strallendorf, Millarville.

High Jump, mare or gelding, over 14.2 hands.

1st	Smokey	D. P. McDonald, Cochrane.
2nd	Sioux	Adams & de Roaldes, Calgary.
3rd	Paddy	F. C. Lowes & Co.

Okotoks Hunter Trophy.

1st	Sioux	Adams & de Roaldes, Calgary.
2nd	Dodger	Geo. Roels, Calgary.
3rd	Zino	A. McPherson, Cochrane.
4th	Robin Hood	Mrs. C. Gardner, Springbank.

Special for hunting pairs.

1st	Nantucket & Royal Anjou	Count B. de Charnace, Calgary.
2nd	Sailor	Geo. Roels, Calgary.
3rd		Adams & de Roaldes, Calgary.
4th	Zino and Joe	Angus McPherson, Cochrane.

Champion Hunter or Jumper.

Please	Geo. Roels, Calgary.
Reserve: Sioux	Adams & de Roaldes, Calgary.

Hunter, mare or gelding, 15 hands or over, 4 years or over. Light weight.

1st	Why Not	Adams & de Roaldes, Calgary.
2nd	Lady Beaverdam	R. Von Strallendorf, Millarville.
3rd	Grey Cloud	Murray Hendrie, High River.

Heavy weight.

1st	Please	Geo. Roels, Calgary.
2nd	Sailor	Geo. Roels, Calgary.
3rd	Tobie	Adams & de Roaldes, Calgary.

Hunter, mare or gelding, 4 years or over, 15 hands or over.

1st	Please	Geo. Roels, Calgary.
2nd	Sailor	Geo. Roels, Calgary.
3rd	Why Not	Adams & de Roaldes, Calgary.
4th	Lady Beaverdam	R. Von Strallendorf, Millarville.

Special Challenge Cup. Best performance over 4 jumps.

1st	Sioux	Adams & de Roaldes, Calgary.
2nd	Sailor	Geo. Roels, Calgary.

Champion Hunter.

Please	Geo. Roels, Calgary.
Reserve: Why Not	Adams & de Roaldes, Calgary.

Mare or gelding shown to express or delivery wagon.

1st	P. Burns & Co.
2nd	Carlyle Dairy Co.
3rd	P. Burns & Co.

Mare or gelding shown to a single lorrie or cart.

1st	Carlyle Dairy Co.
2nd	L. T. Mewburn & Co.

Heavy team as used by wholesaler, retailer or manufacturer.

1st	P. Burns & Co.
2nd	Imperial Oil Co.

Light team as used by wholesaler, retailer or manufacturer.

1st	Calgary City Delivery.
2nd	Ontario Laundry.
3rd	P. Burns & Co.

Heavy team as used by cartage company.

1st	The Pacific Cartage Co.
2nd	The Pacific Cartage Co.
3rd	The Pacific Cartage Co.
4th	The Pacific Cartage Co.

Single delivery.

1st	Jos. Fisher, Millarville.

Livery Exhibit.

1st	I. G. Ruttle, & Co., Calgary.

Pair of mares or geldings to be shown to appropriate vehicle.

1st	I. G. Ruttle, Calgary.

Mare or gelding, to be shown to appropriate vehicle.

1st	I. G. Ruttle, Calgary.

Mare or gelding, 14.2 hands or over, to be shown under saddle.

1st	I. G. Ruttle, & Co., Calgary.

This report would not be complete without the kindest reference and expression of appreciation of the assistance given the show and the general work of the association by the press of western Canada. The amount of prizes paid and the general expenses of the show take practically all of the revenue, and advertising appropriations are consequently small, and the co-operation extended by the agricultural press and the newspapers generally in western Canada is all the more appreciated.

The Departments of Agriculture of the Dominion of Canada and of Alberta have co-operated in every possible way towards the success of the work of the association, and the citizens of Calgary also aided materially through generous contributions to the expenses of the show.

Respectfully submitted,

E. L. RICHARDSON,
Secretary-Treasurer and Managing Director.

APPENDIX B.

ALBERTA CATTLE BREEDERS' ASSOCIATION.

THIRTEENTH ANNUAL REPORT.

HON. DUNCAN MARSHALL,
Minister of Agriculture.

Sir,—I have the honour to submit herewith the thirteenth annual report of the Alberta Cattle Breeders' Association for the year 1912-13.

The annual meeting of the Alberta Cattle Breeders' Association was held in the offices at Victoria Park, Calgary, on Monday April 7th, 1913.

MINUTES OF ANNUAL MEETING.

Mr. J. L. Walters, president, in the chair.

The minutes of the last annual meeting were adopted as read.

Mr. Walters gave a short address in which he mentioned particularly the bright outlook for the cattle industry in Alberta, the present prices of beef with no immediate prospects of any reduction in the price which was an encouragement to those who have stayed in the cattle business during the times when it was not very remunerative. He confidently expected that the cattle industry in Alberta would continue to increase in importance each year. The secretary then read the annual report and the financial statement.

Moved by Mr. Wright, seconded by Mr. Turner—

That the reports be adopted as read. (Carried.)

Moved by Mr. Turner, seconded by Mr. Mace—

That Mr. Walters be appointed to represent the Alberta Cattle Breeders' Association at a joint meeting of the representatives of live stock associations of the four western provinces, to be held at Calgary on Thursday next. (Carried.)

Considerable discussion then arose in connection with the inspection of tuberculosis of cattle coming into the province. The live stock commissioners, Tolmie and McDonald from Victoria, explained the system which had been adopted in connection with inspection of purebred cattle coming into British Columbia. They explained that before purebred animals were permitted to enter British Columbia they have to pass a test for tuberculosis. The meeting was of the opinion that as the tuberculosis test was enforced for animals entering British Columbia, the tendency would be to make Alberta and the other western provinces a dumping ground for cattle affected with tuberculosis, which could not be dumped into British Columbia.

After careful consideration it was moved by Mr. Turner, seconded by Mr. Laycock—

That the Dominion government be petitioned to put in force the same regulations for Alberta, as are in force for British Columbia in respect to inspection for tuberculosis of all purebred animals coming into Alberta, and that the inspection shall apply to grade dairy cattle being imported into the province as well as purebreds. (Carried.)

Moved by Mr. Fletcher, seconded by Mr. Tees—

That the Alberta government be asked to enforce the present brand inspection act, especially with regard to the inspection of hides. (Carried.)

The election of officers was then proceeded with and resulted as follows:

OFFICERS OF THE ALBERTA CATTLE BREEDERS' ASSOCIATION, 1913.

Hon. President	John A. Turner, Calgary.
President	J. L. Walters, Clive.
First Vice-President	Wm. Sharpe, Lacombe.
Second Vice-President	Bryce Wright, de Winton.

BREED DIRECTORS.

Shorthorns	A. E. Shuttleworth, Blackie.
Herefords	P. F. Huntley, Onion Lake.
Aberdeen Angus	Lew Hutchinson, Duhamel.
Galloway	W. E. Tees, Lacombe.
Holsteins	Thos. Laycock, Calgary.
Ayrshires	A. H. Trimble, Red Deer.
Jerseys	C. A. J. Sharman, Red Deer.

GENERAL DIRECTORS.

S. M. Mace, Pekisko.
A. H. Bolton, Gladys.
Jas. Wilson, Innisfail.
Thos. Baird, Red Willow.
Prof. W. J. Elliott, Olds.

EX-OFFICIO DIRECTORS.

Hon. Duncan Marshall, Minister of Agriculture, Edmonton.
John Bright, Live Stock Commissioner, Ottawa.

HONORARY DIRECTORS.

W. F. Stevens, Live Stock Commissioner, Edmonton.
H. S. Arkell, Assistant to Live Stock Commissioner, Ottawa.
Dr. J. C. Rutherford, Supt. of Animal Husbandry, C. P. R., Calgary.

Moved by Mr. Turner, seconded by Mr. Tees—

That Mr. J. B. Sutherland, chartered accountant, Calgary, be appointed official auditor of the Alberta Cattle Breeders' Association. (Carried.)

Moved by Mr. Wright, seconded by Mr. Turner—

That the secretary be instructed to communicate with the different railroads endeavouring to have a more satisfactory cattle guard constructed over their lines. (Carried.)

The meeting then adjourned.

After the meeting the Shorthorn breeders were asked by Mr. S. R. English to stay and consider correspondence in connection with the difficulty he had with the Dominion Shorthorn Breeders' Association over the registration of some animals. Mr. English pointed out that as a result of his being expelled from the Dominion Shorthorn Breeders' Association, and afterwards reinstated when the Shorthorn Breeders' Association found a mistake had been made, that he had suffered severe loss, and had gone out of the purebred cattle business. After considering the question it was moved by Mr. Turner, and seconded by Mr. Wilson—

That the Dominion Shorthorn Breeders' Association be asked to make public apology in connection with this matter. (Carried.)

ANNUAL REPORT OF THE SECRETARY.

Gentlemen,—I present herewith the thirteenth annual report of the Alberta Cattle Breeders' Association covering the year 1912-13.

The Alberta Cattle Breeders' Association have now held sixteen auction sales, have sold 2210 head of cattle for the sum of $201,617.50, the general average obtained being $95.15.

The sale held at Calgary on April 10th, and at Lacombe on May 29th were the most successful yet held by the association. The average obtained for 97 head sold at the Calgary sale was $112.11, and for 37 head sold at Lacombe, 140.00. These are the highest averages ever obtained at an association sale. The highest average received at previous sales was $108.00 which was received in 1906.

At the Calgary sale 58 Shorthorns averaged $122.95, 24 Herefords $112.08, 1 Galloway sold for $115.00, 9 Aberdeen Angus averaged $78.80, and 5 Holsteins averaged $65.00. At the Lacombe sale 4 Aberdeen Angus averaged $152.50, 2 Holsteins averaged $140.00, 6 Herefords averaged $140.83, 25 Shorthorns averaged $143.44. P. A. Switzer had the honour of selling the highest priced bull at the Lacombe sale, which was a Shorthorn and sold for $235.00. David

Sinclair of Innisfail sold the highest priced bull at the Calgary sale, also a Shorthorn for $363.00. The quality of stock offered was better than at previous sales, and the indications are that the success of future sales is assured. The demand for cattle was probably never as good as at the present time. Stock breeders who have continued in the business while others were disposing of their stock, will now reap their reward. It is fortunate that the general tendency in Alberta is towards increased live stock production. Every possible means is being directed towards this end, and the price of grain compared with the price of beef during the year has presented a very practical lesson to those who are devoting their attention entirely to grain growing. The province of Alberta will no doubt be one of the richest and most prosperous in the Dominion of Canada when the large percentage of the grain growers have realized the necessity of stock raising, and have put their views into practice.

The awards at the show at Calgary were placed by G. H. Hutton of Lacombe, and at Lacombe by Thos. Laycock of Calgary. Mr. S. W. Paisley of Blackfalds, Alta., again acted as auctioneer at both of the auction sales of 1912-13 in his usual efficient manner.

Following is a comparative statement of the sales held by the associations:

HIGHEST PRICES REALIZED.

1901	$250.00	Shorthorn bull sold by P. Talbot & Son, Lacombe.
1902	290.00	Shorthorn bull sold by John Ramsay, Priddis.
1903	255.00	Hereford bull sold by O. Palmer, Lacombe.
1904	285.00	Shorthorn bull sold by Hon. W. Beresford, Calgary.
1905	225.00	Shorthorn bull sold by D. Sinclair, Innisfail.
1906	365.00	Shorthorn bull sold by A. F. McGill, Lacombe.
1907	170.00	Shorthorn bull sold by James Sharp, Lacombe.
1908	400.00	Shorthorn bull sold by John A. Turner, Calgary.
1909	180.00	Shorthorn bull sold by Bryce Wright, de Winton, (Calgary.)
	180.00	Shorthorn bull sold by Wm. Sharp, Lacombe.
	150.00	Shorthorn bull sold by Thos. Talbot, Lacombe.
	150.00	Aberdeen Angus sold by R. E. Johnston, Lacombe, (Lacombe.)
	150.00	Aberdeen Angus sold by J. H. Fay, Blackfalds.
1910	205.00	Shorthorn bull sold by Jas. A. Hogge, Okotoks, (Calgary.)
1910	200.00	Shorthorn bull sold by Wm. Sharpe, Lacombe, (Lacombe.)
1911	185.00	Shorthorn bull sold by Wm. Sharpe, Lacombe, (Calgary.)
1911	165.00	Shorthorn bull sold by Wm. Sharpe, Lacombe, (Lacombe.)
1912	363.00	Shorthorn bull sold by David Sinclair, Innisfail, (Calgary.)
1912	235.00	Shorthorn bull sold by P. A. Switzer, Lacombe, (Lacombe.)

The following is a list of prize winners at the purebred cattle show, 1912:

SHORTHORN BULLS.

Three years and over.

1st	Brilliant Character	A. F. McGill, Lacombe.
2nd	Radiance, 71702	J. Shields.
3rd	Forest Boy, 77155	Roberts Bros.

30 *months and under* 3 *years.*

1st	Justus, 81175	P. A. Switzer, Lacombe.

Two years and under 30 *months.*

1st	Maple Leaf Tom, 85141	P. A. Switzer, Lacombe.

18 *months and under* 2 *years.*

1st	Silver King, 82850	David Sinclair, Innisfail.
2nd	Crimson Count, 84477	A. F. McGill, Lacombe.
3rd	Crimson Dude, 84476	A. F. McGill, Lacombe.
4th	Dugald Brawith, 84862	J. L. Walters, Clive.
5th	Red Cloud, 84935	A. W. Latimer, Bowden.

Yearlings and under 18 months.

1st	Romeo, 84937	A. W. Latimer, Bowden.
2nd	Count Lavendar	Bryce Wright, De Winton.
3rd	Moonstone, 84708	Bryce Wright, De Winton.
4th	Diamond Prince	Bryce Wright, De Winton.
5th	King Bruce, 82204	Roberts Bros.

Best Shorthorn bull, any age, bred in Alberta.

Silver King, 82850	David Sinclair, Innisfail.

Best Shorthorn, any age.

Silver King, 82850	David Sinclair, Innisfail.

HEREFORDS.

Thirty months and under 3 years.

1st	Hamburg, 9450	Thos. Croxford, Airdrie.
2nd	Ike, 10103	Thos. Baird, Red Willow.
3rd	Archie, 10015	A. Fletcher, Mound.

Two years and under 30 months.

1st	Drumsticks, 11162	B. F. Huntley, Onion Lake.
2nd	Harold, 11232	A. Fletcher, Mound.

Eighteen months and under 2 years.

1st	Hastings 2nd, 10994	S. M. Mace, Pekisko.
2nd	Philip, 11234	A. Fletcher, Mound.
3rd	Luther, 11231	A. Fletcher, Mound.
4th	Burdens Pride, 11271	Thos. Baird, Red Willow.

Yearling and under 18 months.

1st	Beau Royal, 11224	S. M. Mace, Pekisko.
2nd	Drummer, 11160	P. F. Huntley, Onion Lake.
3rd	St. Valentine, 11225	J. H. O'Neill, Crossfield.

Best Hereford bull, any age, bred in Alberta.

Beau Royal, 11224	S. M. Mace, Pekisko.

Best Hereford bull, any age.

Beau Royal, 11224	S. M. Mace, Pekisko.

ABERDEEN ANGUS.

Three years and over.

1st	Van Vleit, 3710	Wm. Parslow, Calgary.
2nd	Delemere Lad, 3712	F. R. Cathro, Calgary.

Two years and under three years.

1st	Wildwood Gaylawn 9th, 4354	G. G. Melson, Olds.
2nd	Casa Loma Justin, 5554	F. R. Cathro, Calgary.

Under two years.

1st Wildwood Gaylawn 13th, 5334.Geo. G. Melson, Olds.
2nd Casa Loma Erroll 4th, 4786..F. R. Cathro, Calgary.
3rd Casa Loma Merroll, 5553.....F. R. Cathro, Calgary.
4th Lal Tulwar, 5149............W. T. G. McClure, Innisfail.

Best Aberdeen Angus bull, any age, bred in Alberta.

Wildwood Gaylawn 9th, 4354.....Geo. G. Melson, Olds.

Best Aberdeen Angus bull, any age.

Wildwood Gaylawn 9th, 4354.....Geo. G. Melson, Olds.

GALLOWAYS.

Two years and under three years.

1st Tom of Tees, 1812..........W. E. Tees, Lacombe.

Best Galloway bull, any age, bred in Alberta.

Tom of Tees, 1812...............W. E. Tees, Lacombe.

Best Galloway bull, any age.

Tom of Tees, 1812...............W. E. Tees, Lacombe.

HOLSTEINS.

Two years and under.

1st Prince Clothilde, 11643......C. P. R. Demonstration Farm, W. J. Elliott, Strathmore.
2nd Sir Wagler de Kol, 11642....W. J. Elliott, Strathmore.
3rd Countess Claras Sarcastic 11641.W. J. Elliott, Strathmore.
4th Sarcastic Lu, 11640..........W. J. Elliott, Strathmore.

Best Holstein bull, any age.

Prince Clothilde, 11643...........C. P. R. Demonstration Farm.

JERSEYS.

Two years and under.

1st Albertas Fox, 1067...........G. S. Rosamond, Innisfail.
2nd Innisfails Lad, 2297..........G. S. Rosamond, Innisfail.

FINANCIAL STATEMENT FOR THE YEAR ENDING DECEMBER 31st, 1912.

Income 1912.

Alberta Government Grant	$1200.00	
Canadian Bank of Commerce	25.00	
Transportation Fees	666.88	
Commissions on Sales and Loading Charges	383.39	
Entry Fees	296.00	
Membership Fees	83.00	
Advertising	40.00	
Sundries	12.15	
Total Receipts 1912		$2706.42

EXPENDITURE 1912.

Freight and Shipping Charges	$ 704.89	
Secretary, Auctioneer, and Office Expense	808.82	
Printing and Advertising	360.92	
Prizes and Medals	253.00	
General Grounds Expense	184.24	
Total Expenditure 1912		$2311.87
Excess of Receipts over Expenditures 1912		$394.55
Overdraft December 31, 1911	$ 651.57	
Balance on 1912 Account	394.55	
Overdraft December 31, 1912		$257.02

SALES ACCOUNT 1912.

DR.

Proceeds of Sale at Calgary	$10972.00	
Proceeds of Sale at Lacombe	5181.00	
		$16153.00

CR.

Paid to Contributors to Calgary Sale	$10693.11		
Commissions and Charges deducted	278.89		
		$10972.00	
Paid to Contributors to Lacombe Sale	$5076.50		
Commissions and Charges deducted	104.50		
		5181.00	
			$16153.00

Calgary, 10th March, 1913.
Audited and found correct,
(*Signed*) JAMES B. SUTHERLAND, Chartered Accountant,
Auditor.

I hand you herewith the financial statement of the Alberta Cattle Breeders' Association for the year 1912-13. I am pleased to be able to report a smaller deficit this year. The overdraft at the end of 1911 was $651.57, the present overdraft being $257.02, which is a reduction of $394.55.

Your executive committee made application to the Hon. Duncan Marshall, minister of agriculture, for an increase in the provincial government grant from $1200 to $1500, which increase was concurred in by Mr. Marshall, and it is hoped that in a couple of years it will be possible to clear off the deficit entirely.

LIVE STOCK SHIPPING REGULATIONS.

A committee composed of representatives from various provinces in Canada in connection with the proposed special live stock contract, have not yet, I understand, been able to come to satisfactory arrangements with the railway companies, and the question will no doubt be submitted to the railway commission. Your committee which was appointed to revise the proposed live stock shipping regulations, reports progress. Meetings have been held and each time the regulations are brought to a more equitable basis as between the live stock shippers and the railroads. Another meeting will be held in the near future to finally complete the regulations and to have them put in force.

RANCH COMMISSION.

During the year the Dominion Ranch Commission was appointed. This commission held meetings throughout Alberta, and the undersigned as secretary of the live stock associations, assisted in securing representative meetings. It is hoped that the recommendations of the commission will add much to the permanency of the cattle industry.

BETTER FREIGHT RATES.

Your executive committee acting with the executive committees of the Alberta Horse, Sheep and Swine Breeders' Associations met representatives of the C. P. R. with a view to having the privilege of completing a carload shipment of purebred cattle en route, or taking out part of a carload en route, by paying $3 for the first stop and $2 for subsequent stops. The representations of the associations were agreed to by the C. P. R. authorities, and are now in force under Tariff No. W 2676. This, of course, refers to purebreds only. A person shipping a carload of purebred cattle from, say, Calgary to Macleod, may unload an animal at High River by paying $3 above the carload charges, and another one at Claresholm by paying $2 extra. The same applies if the person is completing the loading of a car.

The undersigned recently attended a meeting of live stock associations' representatives at Winnipeg where a strong application was made to the express companies for a half rate for purebred stock. The representatives were well received, and we hope to be able to announce in a short time a reduction in the rates on purebred live stock sent by express.

You will at this meeting be asked to appoint a representative of this association to attend a joint meeting of similar representatives from the horse, cattle, sheep and swine breeders' associations of Manitoba, Saskatchewan, Alberta and British Columbia, which will meet in Calgary on Friday of this week to discuss the question of western representation on the boards of breed societies having their head offices in eastern Canada, also matters connected with the international records, and other questions which the western live stock associations are of the opinion should be taken up in order to properly look after the western Canadian live stock interests.

The Dominion and Alberta Departments of Agriculture have continued their kind co-operation financially and otherwise, towards the work of the association during the year, and I wish to express on behalf of the association the appreciation of the members for the increase which has been promised by the Honourable Duncan Marshall to the provincial government grant to the Cattle Breeders' Association.

Respectfully submitted,
E. L. RICHARDSON,
Secretary-Treasurer and Managing Director.

APPENDIX C.

ALBERTA SWINE BREEDERS' ASSOCIATION.

NINTH ANNUAL REPORT.

HON. DUNCAN MARSHALL,
Minister of Agriculture.

Sir,—I have the honour of presenting herewith the ninth annual report of the Alberta Swine Breeders' Association for the year 1911-12.

The annual meeting was held during the fat stock show at Calgary, November 28th, 1912.

MINUTES OF THE ANNUAL MEETING

The annual meeting of the Alberta Swine Breeders' Association was held in the offices, Calgary, Thursday, November 28th, 1912.

The president, Mr. Lew Hutchinson, in the chair.

There were forty-two present.

Mr. W. F. Stevens, Live Stock Commissioner for Alberta, gave a most interesting address on swine raising. Mr. R. S. Hamer, B.S.A., of the live stock branch, Department of Agriculture, Ottawa, gave an address on the general outlook of live stock supply in Canada, which was most instructive.

The minutes of the last meeting were adopted as read. The secretary then presented the annual report and financial statement.

Moved by Mr. Oscar Miller, seconded by Mr. Downie—

That the reports be adopted as read.

The election of officers resulted as follows:

President	Lew Hutchinson, Duhamel.
First Vice-President	Rice Shepard, Strathcona.
Second Vice-President	W. E. Tees, Lacombe.

BREED DIRECTORS.

Yorkshires	H. W. Watkin, Olds.
Berkshires	Fred Downie, Carstairs.
Duroc Jerseys	Oscar Miller, Cheadle.
Tamworths	Mr. Clements, Manager, Alberta Government Demonstration Farm, Olds.
Poland Chinas	L. O. Norton, Raymond.

GENERAL DIRECTORS.

J. H. Elliott	Irma.
J. Maurer	Clive.
Prof. W. J. Elliott	Strathmore.
H. H. Jenkins	Pincher Creek.
Frank Downie	Carstairs.

Moved by Mr. Miller, seconded by Mr. Tees—

That J. B. Sutherland, chartered accountant, be appointed auditor for the ensuing year.

The meeting then adjourned.

ANNUAL REPORT OF THE SECRETARY.

Gentlemen,—I have pleasure in presenting herewith the ninth annual report of the Alberta Swine Breeders' Association, being for the year 1911-12.

ALBERTA PROVINCIAL FAT STOCK SHOW.

Owing to the change in the date of holding the show, reports covering the 1911 and 1912 Fat Stock Shows are presented herewith.

A comparison of the numbers of entries for the past six years is as follows:

1907	17 entries.
1908	19 entries.
1909	57 entries and 2 carloads.
1910	37 entries and 1 carload.
1911	58 entries and 1 carload.
1912	74 entries and 2 carloads.

The list of prize winners at the two shows above mentioned is given below:

PRIZE WINNERS OF 1911.

YORKSHIRES.

Purebred barrow or sow, 6 months and under 12 months.

1st	H. W. Watkin	Olds.
2nd	H. W. Watkin	Olds.
3rd	W. E. Tees	Lacombe.

Barrow or sow under 6 months.

1st	H. W. Watkin	Olds.
2nd	W. E. Tees	Lacombe.
3rd	H. W. Watkin	Olds.

Champion Yorkshire, any age or sex.

H. W. Watkin..................................Olds.

POLAND CHINAS.

Barrow or sow under 6 months.

1st Chestermere Stock Farm.

GRADES.

Barrow or sow, 6 months or under 12 months.

1st Thos. Croxford..............................Airdrie.
2nd C. Meers....................................Calgary.
3rd A. J. B. Dewdney...........................Calgary.

Barrow or sow under 6 months.

1st W. E. Tees..................................Lacombe.
2nd W. E. Tees..................................Lacombe.
3rd W. E. Tees..................................Lacombe.

Barrow or sow, 6 months and under 12 months.

1st H. W. Watkin................................Olds.
2nd H. W. Watkin................................Olds.
3rd H. W. Watkin................................Olds.

Barrow or sow under 6 months.

1st H. W. Watkin................................Olds.
2nd H. W. Watkin................................Olds.
3rd H. W. Watkin................................Olds.

Best pen of three bacon hogs.

H. W. Watkin....................................Olds.

Carload of not less than 20 head, purebred or grade.

W. E. Tees......................................Lacombe.

Dressed carcases.

1st Thos. Croxford..............................Airdrie.
2nd W. E. Tees..................................Lacombe.
3rd W. E. Tees..................................Lacombe.

Purebred or grade dressed carcases.

1st H. W. Watkin................................Olds.
2nd Thos. Croxford..............................Airdrie.
3rd H. W. Watkin................................Olds.

BERKSHIRES.

Barrow or sow, 6 months and under 12 months.

1st T. A. Cox..................................Brantford, Ont.
2nd E. E. Baynton..............................
3rd E. E. Baynton..............................

Barrow or sow under 6 months.

1st T. A. Cox..................................Brantford, Ont.
2nd T. A. Cox..................................Brantford, Ont.

Champion, any age or sex.

T A Cox..Brantford, Ont.

YORKSHIRES.

Barrow or sow, 6 months and under 12 months.

1st H. W. Watkin...............................Olds.
2nd H. W. Watkin...............................Olds.
3rd E. E. Baynton..............................

Barrow or sow under 6 months.

1st H. W. Watkin...............................Olds.
2nd E. E. Baynton..............................
3rd T. A. Cox..................................Brantford, Ont.

Champion, any age or sex.

H. W. Watkin...................................Olds.

POLAND CHINAS.

Barrow or sow under 6 months.

1st J. A. McCullough...........................Calgary.

Champion, any age or sex.

J. A. McCullough...............................Calgary.

GRADES.

Barrow or sow, 6 months and under 12 months.

1st Thos. Croxford.............................Airdrie.
2nd E. E. Baynton..............................
3rd W. E. Tees.................................Lacombe.

Barrow or sow under 6 months.

1st W. E. Tees.................................Lacombe.
2nd H. W. Watkin...............................Olds.
3rd H W. Watkin................................Olds.

GRADES, BACON TYPE.

Barrow or sow, 6 months and under 12 months.

1st	E. E. Baynton	
2nd	W. E. Tees	Lacombe.
3rd	W. E. Tees	Lacombe.

Barrow or sow under 6 months.

1st	H. W. Watkin	Olds.
2nd	H. W. Watkin	Olds.
3rd	T. A. Cox	Brantford, Ont.

SPECIAL OFFERED BY SWIFT CANADIAN CO.

Best pen of 3 bacon hogs, weight of each animal to range from 175 to 220 pounds.

1st	H. W. Watkin	Olds.

CARLOAD LOTS.

1st	W. E. Tees	Lacombbe.

Grand Championship, best bacon hog, any age, purebred or grade.

T. A. Cox (Berkshire)	Brantford, Ont.

DRESSED CARCASSES.

Purebred or grade. Medium thick.

1st	W. E. Tees	Lacombbe.
2nd	A. F. McGill	
3rd	W. E. Tees	Lacombe.

Purebred or grade, bacon type.

1st	E. E. Baynton	
2nd	W. E. Tees	Lacombe.
3rd	H. W. Watkin	Olds.

Arrangements were made with Messrs. P. Burns & Co. to slaughter the entries as in past years, and also to purchase the animals entered in the dressed carcase competitions on the following basis:

PRICES PAID.

AT THE 1911 SHOW—DRESSED HOGS.

First Prize	16 cents.
Second Prize	15 cents.
Balance	13 cents.

AT THE 1912 SHOW.

First Prize	15 cents.
Second Prize	13 cents.
Balance	11½ cents.

Following is a list of the winners with the weights and amounts received for their stock:

1911.

PUREBRED OR GRADE, MEDIUM THICK.

Name of Owner.	Live Weight	Dressed Weight	Per Cent.	Price	Value Realized
Thos. Croxford	345	315	91.30	13	$39.00
Thos. Croxford	315	293	93.01	13	36.92
Thos. Croxford (1st)	265	235	88.67	16	37.44
W. E. Tees	275	228	82.90	13	29.51
W. E. Tees (2nd)	240	200	83.33	15	30.00
W. E. Tees (3rd)	255	208	81.56	13	27.04

PUREBRED OR GRADE, BACON TYPE.

Thos. Croxford	140	122	87.14	13	$14.30
Thos. Croxford (2nd)	135	118	87.40	15	15.75
Thos. Croxford	140	115	82.14	13	14.30
W. E. Tees	240	200	83.33	13	26.00
W. E. Tees	255	220	86.27	13	27.56
W. E. Tees	265	205	77.35	13	26.65
H. W. Watkin (3rd)	205	185	90.24	13	22.23
H. W. Watkin	185	170	91.89	13	20.28
H. W. Watkin (1st)	200	180	90.00	16	26.72

SWINE—1912.

PUREBRED OR GRADE, MEDIUM THICK.

Name of Owner.	Live Weight	Dressed Weight	Shrunk Weight	Per Cent.	Price	Value Realized
W. H. Croxford ..	110	97	94	88.18	11½	$10.81
Thos. Croxford ..	190	162	156	85.26	11½	17.94
W. E. Tees	245	210	202	85.71	11½	23.23
W. E. Tees (3rd).	265	240	232	90.56	11½	26.68
W. E. Tees (1st).	235	208	203	88.51	15	30.45
E. E. Baynton ...	210	175	168	83.33	11½	19.32
H. W. Watkin ...	180	159	153	88.33	11½	17.59
H. W. Watkin ...	150	130	124	86.66	11½	14.26
H. W. Watkin ...	175	156	150	89.14	11½	17.25
A. F. McGill (2nd)	225	200	194	88.88	13	25.22

PUREBRED OR GRADE, BACON TYPE.

W. H. Croxford ..	100	90	85	90.00	11½	$9.77
W. H. Croxford ..	100	87	83	87.00	11½	9.54
Thos. Croxford ..	185	155	150	83.78	11½	17.25
Thos. Croxford ..	175	157	151	89.71	11½	17.36
W. E. Tees (2nd).	245	198	191	80.81	13	24.83
W. E. Tees	225	187	180	83.11	11½	20.70
W. E. Tees	210	174	167	82.85	11½	19.20
E. E. Baynton (1st)	250	205	198	82.00	15	29.70
H. W. Watkin ...	230	196	189	85.21	11½	21.73
H. W. Watkin ...	235	204	192	86.80	11½	22.08
H. W. Watkin ...	230	195	189	84.78	11½	21.73
T. A. Cox	160	137	132	85.62	11½	15.18
T. A. Cox	210	178	171	84.76	11½	19.66

CHANGE IN THE DATE OF THE FAT STOCK SHOW.

The decision of the directors of the associations to hold the fat stock show in the fall instead of in the spring, will, we hope, result in a more rapid growth of the show. It has been difficult in the past to secure the interest at the spring show which should be taken in the fat stock show. Holding the show in the early winter will make it possible to have some interesting lectures using live specimens for demonstration, and also lectures on the carcasses after they have been returned from the slaughter house.

A feature which I feel sure will be a benefit to swine breeders throughout the province, and which can be advantageously conducted at the time of the fat stock show is an auction sale of swine. It is hoped that such a sale will be added to the fat stock show next fall.

Below is given the financial statement for the year 1911, which has been duly audited by Mr. F. R. Exham, official auditor, showing that there was a balance of $214.76 on hand at the end of December, 1911.

FINANCIAL STATEMENT OF THE ALBERTA SWINE BREEDERS' ASSOCIATION.

Receipts, 1911.

Balance on hand Dec. 31, 1910	$109.62
Grant by Provincial Department of Agriculture	200.00
Registration Fees	103.40
Membership Fees	101.00
	$514.02

Expenditure.

Postage, Stationery and Office expenses	$113.94
Secretary's Salary	100.00
Freight Charges	45.80
Printing and Advertising	28.50
Prizes	11.02
Balance on hand, 31st December, 1911	214.76
	$514.02

Examined and found correct.
March 7th, 1912.

(*Signed*) F. R. EXHAM,
Auditor.

I shall be pleased to assist in the interchange of purebred live stock if those wishing to purchase and those having stock for sale will advise me from time to time.

Before closing I wish to express appreciation of the assistance always so freely given by the Alberta and Dominion Departments of Agriculture.

Respectively submitted,

E. L. RICHARDSON,
Secretary-Treasurer and Managing Director.

APPENDIX D.

ALBERTA SHEEP BREEDERS' ASSOCIATION.

TENTH ANNUAL REPORT.

HON. DUNCAN MARSHALL,
Minister of Agriculture.

Sir,—I have the honour of presenting herewith the tenth annual report of the Alberta Sheep Breeders' Association for the year 1911-12.

The annual meeting was held during the Fat Stock Show at Calgary, November 28th, 1912.

MINUTES OF THE ANNUAL MEETING.

The Alberta Sheep Breeders' Association annual meeting was held in the offices, Calgary, Thursday, November 28th, 1912.

There were about forty present.

The following addresses were delivered:

"Sell your Hay and Grain to the Live Stock," by Prof. W. J. Elliott, Supt. of Agriculture, Department of Natural Resources, C. P. R.

"Sheep Raising," by R. S. Hamer, B.S.A., Live Stock Branch, Department of Agriculture, Ottawa.

"Profit and Benefit from a Small Flock of Sheep on a Mixed Farm," by John A. Turner of the Balgreggan Stock Farm.

The addresses were listened to with the greatest interest, and the discussion which followed each address assisted in bringing out the local problems.

The minutes of the last meeting were adopted as read. The secretary then read the annual report and presented the financial statement.

Moved by Mr. Knights, seconded by Mr. Downie—

That the reports be adopted.

ELECTION OF OFFICERS.

The election of officers then resulted as follows:

President	Bryce Wright, De Winton.
First Vice-President	Prof. W. J. Elliott, Strathmore.
Second Vice-President	R. Knights, Millarville.

DIRECTORS.

Shropshires	John A. Turner, Calgary.
Leicesters	H. W. Watkin, Olds.
Merinos	E. Harker, Cardston.

GENERAL DIRECTORS.

Alex Shaw	Medicine Hat.
H. A. Malcolm	Innisfail.
Fred Downie	Carstairs.
O. E. Brown	Calgary.
Walter Sporle, Jr.	Edmonton.

Notice of motion was given to change the constitution so that the election of breed directors will be discontinued, and that ten general directors be appointed by the annual meeting, who with the president, vice-presidents and secretary-treasurer shall form the directorate of the Alberta Sheep Breeders' Association.

The meeting then adjourned.

ANNUAL REPORT OF THE SECRETARY.

Gentlemen,—I submit herewith the tenth annual report of the Alberta Sheep Breeders' Association being for the year 1911-1912.

ALBERTA PROVINCIAL FAT STOCK SHOW.

I am very pleased to be able to report the decision of the executive committee of the fat stock show to change the date of the show from the spring to an early winter show. Heretofore it has been difficult to develop the fat stock show with the usual live stock association events in the spring, owing to the horse show and cattle show and sale taking up so much of the time and interest of the breeders. It is confidently expected that when the show is held in the early winter it will be possible to rapidly develop the fat stock show. There will be time for addresses dealing with various live stock subjects, and for meetings where problems facing the live stock breeders and feeders can be discussed. There will also be time for dressed carcases to be displayed and addresses delivered with the carcases present as illustrations. The undersigned looks forward with a very great deal of pleasure to the building up of the fat stock show. I feel sure that those of us present today will be surprised at the strides to be made in the development of the fat stock show in the course of the next four or five years.

Owing to the short notice given of the change in the fat stock show dates, we do not anticipate a large entry at the first show, but we confidently look forward to a splendid increase in the entries next year.

A comparison of the number of entries for the past six years is as follows:

1907	12 entries.
1908	19 entries.
1909	52 entries and one carload.
1910	67 entries and two carloads.
1911	37 entries and one carload.
1912	51 entries and three carloads.

I have pleasure in attaching hereto a list of the prize winners in the various classes at the fat stock show held in the spring of 1911 and also in the spring of 1912:

PRIZE WINNERS—FAT STOCK SHOW, 1911.

SHEEP.

Purebred Shropshires.

Class 12. *Ewe or wether sheep born previous to* 1910.

1st	H. W. Watkin	Olds.
2nd	H. W. Watkin	Olds.
3rd	Walter Sporle, Jr.	Edmonton.

Ewe or wether lamb of 1910.

1st	John A. Turner	Calgary.
2nd	John A. Turner	Calgary.
3rd	H. W. Watkin	Olds.

Champion Shropshire, any age or sex.

John A. Turner	Calgary.

Ewe or wether sheep born previous to 1910.

1st	H. W. Watkin	Olds.

OXFORDS.

Ewe or wether born previous to 1910.

1st	H. W. Watkin	Olds.

Ewe or wether lamb of 1910.

1st Bryce Wright..............................De Winton.
2nd Bryce Wright..............................De Winton.
3rd Bryce Wright..............................De Winton.

Champion Oxford, any age or sex.

Bryce Wright..................................De Winton.

SUFFOLKS.

Ewe or wether sheep born previous to 1910.

1st H. W. Watkin..............................Olds.

Ewe or wether lamb of 1910.

1st H. W. Watkin..............................Olds.

Champion Suffolk, any age or sex.

H. W. Watkin..................................Olds.

SOUTHDOWNS.

Ewe or wether sheep born previous to 1910.

1st H. W. Watkin..............................Olds.

Ewe or wether lamb of 1910.

1st H. W. Watkin..............................Olds.

Champion Southdown, any age or sex.

H. W. Watkin..................................Olds.

ANY OTHER PUREBREDS.

Ewe or wether sheep born previous to 1910.

1st H. W. Watkin (Cotswold ewe)...............Olds.
2nd H. W. Watkin (Cotswold ewe)...............Olds.

Ewe or wether lamb of 1910.

1st H. W. Watkin (Hampshire ewe)..............Olds.

Champion, any age or sex.

H. W. Watkin (Hampshire ewe)..................Olds.

GRADES OR CROSSES.

Ewe or wether sheep born previous to 1910.

1st W. & T. Stuart............................Priddis.
2nd H. W. Watkin..............................Olds.
3rd H. W. Watkin..............................Olds.

Ewe or wether lamb of 1910.

1st W. & T. Stuart..............................Priddis.
2nd H. W. Watkin..............................Olds.
3rd H. W. Watkin..............................Olds.

Carload of not less than 20 head, purebred or grade.

1st H. W. Watkin..............................Olds.

DRESSED CARCASES.

Purebred or grade, ewe or wether, born previous to 1910.

1st H. W. Watkin..............................Olds.
2nd H. W. Watkin..............................Olds.
3rd H. W. Watkin..............................Olds.

Purebred or grade lamb of 1910.

1st H. W. Watkin..............................Olds.
2nd H. W. Watkin..............................Olds.
3rd H. W. Watkin..............................Olds.

GRAND CHAMPIONSHIP.

Best sheep, any age, purebred or grade.

Bryce Wright (Oxford ewe).....................De Winton.

Prize Winners in Sheep Classes, 1912.

SHROPSHIRES.

Ewe or wether sheep born previous to 1911.

1st C. E. Baynton ....
2nd H. W. Watkin..............................Olds.
3rd C. E. Baynton ....

Ewe or wether lamb of 1911.

1st T. A. Cox ....Brantford, Ont.
2nd C. E. Baynton ....

Champion Shropshire, any age or sex.

C. E. Baynton..............................

OXFORDS.

Ewe or wether sheep born previous to 1911.

1st C. E. Baynton ....

Champion Oxford, any age or sex.

C. E. Baynton..............................

SUFFOLKS.

Ewe or wether sheep born previous to 1911.

1st	H. P. Jaques	
2nd	H. P. Jaques	
3rd	H. P. Jaques	

Ewe or wether lamb of 1911.

1st	H. P. Jaques	
2nd	H. P. Jaques	
3rd	H. P. Jaques	

Champion Suffolk, any age or sex.

H. P. Jaques, (Yearling)	

SOUTHDOWNS.

Ewe or wether lamb of 1911.

1st	T. A. Cox	Brantford, Ont.
2nd	T. A. Cox	Brantford, Ont.
3rd	H. W. Watkin	Olds.

Champion Southdown, any age or sex.

T. A. Cox	Brantford, Ont.

ANY OTHER PUREBREDS.

Ewe or wether sheep born previous to 1911.

1st	C. E. Baynton, (Hampshire)	

Champion.

C. E. Baynton	

GRADES OR CROSSES.

Ewe or wether, shearling and over, born previous to 1911.

1st	C. E. Baynton	
2nd	C. E. Baynton	
3rd	H. W. Watkin	Olds.

Ewe or wether lamb of 1911.

1st	C. E. Baynton	
2nd	C. E. Baynton	
3rd	T. A. Cox	Brantford, Ont.
4th	T. A. Cox	Brantford, Ont.

Carload of not less than 20 *head, purebred or grade, any age.*

1st	H. W. Watkin	Olds.
2nd	H. W. Watkin	Olds.

DRESSED CARCASES.

Purebred or grade, ewe or mutton, born previous to 1911.

1st	H. W. Watkin	Olds.
2nd	C. E. Baynton	
3rd	C. E. Baynton	

Purebred or grade lamb of 1911.

1st	T. A. Cox	Brantford, Ont.
2nd	T. A. Cox	Brantford, Ont.
3rd	H. W. Watkin	Olds.

GRAND CHAMPIONSHIP.

Best sheep, any age, purebred or grade.

C. E. Baynton, (Grade Shropshire Lamb) ....

Arrangements were made with Messrs. P. Burns & Co. to slaughter the entries as usual, and to purchase the animals entered in the dressed carcase competitions on the following basis:

PRICES PAID:

AT THE 1911 SHOW—DRESSED SHEEP.

First Prize	19 cents.
Second Prize	17 cents.
Balance	13½ cents.

AT THE 1912 SHOW—DRESSED SHEEP.

First Prize	17 cents.
Second Prize	15 cents.
Balance	13 cents.

Following is a list of the winners with the weights and amounts received for their stock.

PUREBRED OR GRADE EWE.

Name of Owner.	Live Weight	Dressed Weight	Yield Per cent	Shrunk Weight	Price	Value Realized
H. W. Watkin (2)	120	66	55.00	66	17	$11.22
H. W. Watkin (3)	140	78	55.71	78	13½	10.53
H. W. Watkin (1)	120	70	58.33	70	19	13.30

PUREBRED OR GRADE LAMB OF 1910.

Walter Sporle Jr.	125	65	52.00	65	13½	$8.77
Walter Sporle Jr.	125	67	53.60	67	13½	9.04
H. W. Watkin (2)	75	36	48.00	36	17	6.12
H. W. Watkin (3)	95	50	52.63	50	13½	6.75
H. W. Watkin (1)	90	45	50.00	45	19	8.55

SHEEP—1912.

PUREBRED OR GRADE LAMB OF 1911.

Name of Owner.	Live Weight	Dressed Weight	Shrunk Weight	Rate Per cent.	Price	Value Realized
C. E. Baynton ...	125	72	72	57.60	13	$9.36
H. W. Watkin ...	105	55	54	52.38	13	7.02
H. W. Watkin ...	85	50	49	38.82	13	6.37
H. W. Watkin (3)	110	63	62	57.27	13	8.06
T. A. Cox (1) ...	105	65	63	61.90	17	10.71
T. A. Cox (2) ...	110	65	64	59.09	15	9.60

PUREBRED OR GRADE EWE OR WETHER.

Name of Owner.	Live Weight	Dressed Weight	Shrunk Weight	Rate Per cent.	Price	Value Realized
H. P. Jaques	185	116	112	62.70	13	$14.56
H. P. Jaques	200	111	110	55.50	13	14.30
H. P. Jaques	190	115	112	60.52	13	14.56
C. E. Baynton ...	215	139	137	64.65	13	17.81
C. E. Baynton (3)	150	86	85	57.33	13	11.05
C. E. Baynton (2)	155	93	92	60.00	15	13.80
H. W. Watkin ...	180	111	110	61.66	17	18.70
H. W. Watkin ...	150	84	82	56.00	13	10.66
H. W. Watkin ...	150	86	84	57.33	13	10.92

The association has assisted as far as possible in the interchange of stock. If those having stock for sale will forward a list of same to the offices we shall be glad to send the information out to those making enquiries for stock.

Below is a copy of the financial statement for the year 1911, which has been duly audited by Mr. F. R. Exham, official auditor. The statement shows that there was a balance on hand at the end of 1911 of $206.73.

FINANCIAL STATEMENT FOR 1911.

Receipts.

Balance on hand, 31st December, 1910	$113.91
Grant by Alberta Department of Agriculture	400.00
Membership fees	23.00
	$536.91

Expenditures.

Postage, stationery and office expense	$100.63
Secretary's salary	100.00
Expense in connection meetings of Dominion Sheep Commission in Alberta	65.00
Printing and advertising	28.50
Prizes	22.35
Freight charges	13.70
Balance on hand December 31, 1911	206.73
	$536.91

Examined and found correct.

(*Signed*) F. R. EXHAM,
Auditor.

Those interested in sheep ranching in Alberta will follow with considerable interest the sittings of the commission recently appointed by the Minister of the Interior to enquire into a report upon the advisability of setting apart certain tracts of land for the encouragement of ranching and grazing in southern Alberta and Saskatchewan. It is hoped that at the conclusion of these sittings at the various points in the west, the commission will be able to make acceptable recommendations which will tend to the permanency of the ranching industry of the west without interfering with the development of mixed or general farming. The opinion seems general that there are certain areas within the province which are better adapted to ranching than farming. If the ranch commission are able to establish ranching on a fairly permanent basis on these areas, they will undoubtedly have contributed in no small degree to the development of western Canada.

In closing I wish to express appreciation for the co-operation and assistance so very kindly given by the Alberta and Dominion Departments of Agriculture in connection with the live stock association work.

Respectfully submitted,
E. L. RICHARDSON,
Secretary-Treasurer and Managing Director.

APPENDIX E.

ALBERTA PROVINCIAL FAT STOCK SHOW.

NINTH ANNUAL REPORT.

HON. DUNCAN MARSHALL,
Minister of Agriculture.

Sir,—I beg to hand you herewith the ninth annual report of the Alberta Provincial Fat Stock Show which was held at Calgary, November 26th to 29th, 1912.

The fat stock show of November, 1912, was the second show held in the same year owing to the decision of the executive committee to hold the fat stock shows in the future in the fall instead of in the spring. The result was very gratifying, and we have every reason to believe that the next show will be very much increased in entries over the show of 1912. It was not expected that the first show held in the fall would show much of an increase in entries as it takes some little time to make a change of date known throughout the province, and get breeders interested sufficiently in advance to prepare exhibits:

A comparative list of the exhibits in the various classes for the past three years will be of interest:

FAT STOCK SHOW ENTRIES.

Cattle.

	1910	1911	1912	1912 (Fall Show)
Shorthorns	15	3	13	1
Herefords	3	..	2	1
Galloways	3	3	5	6
Aberdeen Angus	1	3	2	4
Grade Steers	17	19	16	20
Grade Cows and heifers	3	6	8	3
Carloads	2	4	8	4
Dressed Carcases	24	21	22	12
	—	—	—	—
	68	58	76	51

Sheep.

Shropshires	10	8	9	8
Oxford Downs	4	4	1	12
Leicesters	11	..	..	3
Southdowns	4	2	3	5
Suffolks	12	2	9	4
Cotswolds	..	2	..	..
Hampshires	1	..	1	..
Grades	17	8	10	10
Carloads	3	1	3	2
Dressed Carcases	5	9	15	16
	67	36	51	60

Swine.

Berkshires	4	..	6	8
Yorkshires	9	9	10	..
Tamworths	..	..	..	10
Poland Chinas	..	1	2	..
Duroc Jerseys	..	..	..	7
Grades	16	27	25	9
Dressed Carcases	7	16	24	9
	36	53	67	43

There is no question but that the quality of the stock is improving at every show. Some grand individuals were shown in the various classes, and the first prize carload of steers which were exhibited by Mr. Downie, also won first honours at the Toronto Fat Stock Show a couple of weeks after being shown at Calgary in spite of the long railway journey. I have pleasure in handing you herewith the following photos:

First prize carload of steers exhibited by Simon Downie & Sons of Carstairs.

Second prize carload of steers exhibited by W. E. Tees of Lacombe.

Champion steer exhibited by E. S. McLean of Stettler, also a general view of the horse show building in which the Fat Stock Show was held.

I also hand you herewith a copy of the financial statement for the year 1912 and a synopsis of the various addresses which were delivered at the show:

FINANCIAL STATEMENT OF ALBERTA PROVINCIAL FAT STOCK SHOW, 1912.

Receipts.

Alberta Department of Agriculture, grant	$1400.00	
Dominion Department of Agriculture grant	216.66	
Dominion Shorthorn Breeders' Association Grant	100.00	
Canadian Aberdeen Angus Breeders' Association grant	50.00	
Swift Canadian Co. Ltd., donation	25.00	
		$1791.66
Entry Fees	388.50	
Less Refund (ck. 202F)	2.00	
		386.50
Freight Fees		210.00
Gate Receipts (Fall show)		112.38
Total Receipts 1912		2500.54
Overdraft		2136.80
		$4637.34

Disbursements.

Prizes paid at Spring Show		$1689.00	
Prizes paid at Fall Show		1528.00	
			$3217.00
Grounds Expenses and Wages		705.81	
Less sale of straw	$13.75		
Less Poultry Association Share of Expense Fall Show	91.61		
		105.36	
			600.45
Postage, stationery, office expense and extra help		219.61	
Secretary's Salary		100.00	
			319.61
Printing and Advertising			228.83
Freight on Exhibits			208.47
Total Expenditure 1912			4574.36
Overdraft 31st December, 1911			62.98
			$4637.34

Audited and found correct.

JAMES B. SUTHERLAND, Chartered Accountant,
Auditor.

March 10th, 1913.

The Fat Stock Show was officially opened by yourself, Sir, in your official capacity as Minister of Agriculture. You expressed your pleasure at being privileged to again open the fat stock show, and congratulated the officers on their decision to change the date of the show from a spring to a fall show. While it was not expected that the first show under the new date would be as large as would be the case if the date had not been changed, you were of the opinion that the next show on this date would be very considerably larger. Owing to the change in the date your department were willing to increase the amount of the grant, and to co-operate with the associations in every possible way to make the show a benefit to the live stock interests of the province. You further explained that you intended to make the operations of the Alberta Demonstration Farms as great a help to the live stock breeders as possible. Splendid herds were now established on the several demonstration farms, and at two or three of the farms a number of steers had been fed the previous winter, and the data kept would no doubt be of value to feeders generally. It was the intention to continue the experiment on a larger basis this winter, and with a view to encouraging the managers of the various demonstration farms in the work of taking care of the stock, and to add further interest to the fat stock show at Calgary, you intended to pick out a couple of steers at each of the demonstration farms in the spring and have them shown at the next fat stock show in November. A special challenge cup or trophy would be offered for the best two steers exhibited by the demonstration farms, although the steers would not be entered for competition in the regular classes of the show.

In conclusion you declared the fat stock show officially opened, and wished the work of its various officials every success.

You were pleased to state that you were most favourably impressed with the splendid quality of the stock on exhibition, and the excellent accommodation which had been provided for the show.

ADDRESS DELIVERED BY J. G. RUTHERFORD, C.M.G., SUPERINTENDENT OF ANIMAL HUSBANDRY, CANADIAN PACIFIC RAILWAY COMPANY, NATURAL RESOURCES DEPARTMENT.

The Canadian west is coming into its own and will, without doubt and that in the very near future, far surpass in point of progress and prosperity even the most sanguine predictions of the many optimistic prophets who have, from time to time foretold its destinies.

It is however, not exempt from the ailments and limitations which are apt to affect young countries as well as young individuals during the period of growth.

Some of these such as the reckless exploitation of land values and especially the subdivision evil, the general tendency to discount the future and the lack of adequate transportation facilities to provide for the abnormal and unprecedented grain production due to the comparative ease of prairie cultivation and the application to agriculture of modern methods of mechanical traction, although at present sufficiently serious, will very shortly be matters of history and reminiscence. As time goes on and the country becomes settled up, its people will settle down to the business of living and making a living in the only way in which, at least in an inland community such as this, it is possible to do so, namely through the development of its own natural wealth. When the last subdivision now laid out has been sold off or is once more under the plough, these prairie provinces, sobered and steadied by age and experience, will continue to prosper, not through the adventitious aid of imported or borrowed capital but from the returns reasonably and legitimately derived from their own internal resources. On this head there is no room for argument or difference of opinion. It goes without saying therefore that all sober-minded and thoughtful men who are here with the intention of remaining and whose future interests depend on the solid and substantial growth and development of the country are, whether they themselves have as yet fully realized it or not, deeply concerned in the proper conservation of those resources from which alone they can look for either comfort or wealth.

Leaving aside, as of relatively minor or rather subsidiary importance the mineral riches of the west, its timber and its waterpowers, let us see what is going on in the matter of safeguarding and preservation for ourselves and our children of our one great and, if properly husbanded, perpetual source of revenue, the fertility of the soil. Land is land the world over and although there are in these provinces some very considerable areas of remarkably fertile soil, there are other and much more extensive areas in which this condition cannot truthfully be said to exist. Even the richest lands eventually become exhausted unless care is taken to maintain their fertility by the adoption of sane methods of cultivation while in the case of those of medium or inferior strength, the period of profitable continuous cropping is, of course, much more limited. The wonderful tales of the undiminished fertility of western soils after producing successive crops of wheat for decades are in most cases incapable of proof although it may be admitted that in some few localities the soil has shown itself able to withstand wonderfully well the unfair treatment accorded to it. Exceptions, however, only prove the rule and the history of wheat cultivation on this continent furnishes the best possible argument against the short sighted methods of so called farming now too generally in vogue in the Canadian west.

Within the memory of men still living the centre of the wheat growing industry was in western New York. Moving slowly through Ohio, Indiana, Illinois and Iowa, it came north to Minnesota and Dakota until today it rests in western Canada.

Although along the whole course of this progress there were and are still individual farmers who, as a result of using intelligent methods, were able to continue the growing of wheat at a profit, the fact that such cases are far from numerous is clearly shown by the official reports of the average yield per acre in these once great producing communities. That the progressive yearly decrease in yield, which has been observable in the wheat lands of America, is due to faulty methods of husbandry, or, to put it plainly, bad farming and not to any extrinsic cause or causes, is very clearly shown by reference to the statistical crop returns furnished by the government of Great Britain and Ireland. These indicate that on lands which have been steadily and continuously farmed for periods in some cases running into centuries, the average yield of wheat is today from thirty to forty bushels per acre. In one well authenticated case on a very old farm in Scotland the yield per acre was last year fifty-nine bushels.

These facts speak for themselves and although they are capable of substantiation by figures obtainable much nearer home, it is scarcely necessary to run the risk of arousing local feeling by their introduction here.

In applying to our own case the moral derivable from the conditions observed in other countries, it may be well to bear in mind the possibility of the presentation of apparently convincing contrary arguments based on more or less authentic instances of successful and profitable land robbery continued with apparent immunity over comparatively long periods. The possibility of such cases, when the soil is of very exceptional richness, has been already admitted while in regard to any others which may be cited, it may be confidently taken for granted that careful investigation will reveal the existence of methods of culture more or less intentionally or accidentally scientific by which the process of soil exhaustion is being, to at least some extent, retarded. These limitations which are, after all, of but little real importance and which will be further discussed at a future time, having been recognized, we need not hesitate in making the somewhat sweeping statement that unless the farmers of western Canada, as a body, decide and that at an early date, to modify their present methods by the adoption of mixed husbandry and especially by the extensive keeping of livestock, they as well as those interdependent with them on the basic industry of agriculture or in other words, practically the whole community, will inevitably experience a very serious and more or less prolonged period of financial depression. It is true that so long as the price of grain is maintained at or near its present high level and the seasons are reasonably propitious, the crops obtained from the new lands still to be exploited will probably avert anything like a general monetary stringency but this circumstance will not convey much comfort to the individual farmer whose land is then no longer capable of remunerative production and who finds himself compelled either to abandon the struggle or to undertake the slow and painful task of restoring to the soil those precious elements which might so easily have been conserved by the timely adoption of common sense methods.

Those, and their number is by no means small, who honestly consider such views as those here adduced, extreme and unwarranted, will do well to visit, or in some cases at least, revisit those districts even in our own west, which once famous for their wheat production, are now struggling for recognition as being reasonably well adapted for general agriculture. A few days spent in an investigation of this sort, especially in the company of some one familiar with the local history of the district and the record of occupancy of each individual quarter section, will convince the most sceptical that the foundation for permanent comfort and prosperity on the prairie farm can, as a rule, be well and truly laid only by the adoption during the earlier years of tenure of sane and intelligent methods of soil conservation. If, however, further proof is needed let the unconvinced grain grower visit those districts, in which, for one reason or another, as for instance supposed liability to summer frosts when that problem was less well understood than it now is, or settlement far in advance of some long projected but unconstructed railway, the holders of land were compelled or deemed it more profitable to go in for mixed farming. He will there find the best possible evidences of permanent agricultural success and prosperity. The fear of frost has gone or the railroad has come but although paying crops of grain are now produced, they furnish only a part of the annual income of the settler who, still on his original holding with his comfortable buildings about him, is a farmer in fact as well as in name. The conditions which at the beginning he regarded as drawbacks and disadvantages have, by forcing his activities into many different channels, not only made him practically independent of any special market condition but placed him in a position to live, if he wishes to do so, largely within his own resources.

A comparison between a man so situated and one who devotes his attention exclusively to the growing of grain is all in favour of the former. He enjoys to the full the advantage which the real farmer has over practically every one else in being able to secure for himself and his family, at first cost, many of the most expensive necessaries of life, and some of its greatest luxuries. He has, as a rule, good stock about him in which he is interested and which keeps him in touch with the livestock world and all that this implies. Everyone familiar with the farming industry and those engaged in it is well aware that, speaking generally, the good stockman is a man of advanced thought and progressive ideas, and that he reads more and is infinitely better informed and more interested in agricultural matters than his neighbour whose sole study is the grain market and who for nearly half the year has nothing to occupy his time and attention. An even greater contrast exists between the boys on a well conducted modern general farm and those whose only interest in the business is divided between wheat and weeds on the one hand and machinery on the other.

The livestock world is full of interest for any properly constituted youth and the sons of our breeders and feeders are, as a body, by all odds the brightest and best representatives of the younger generation of Canadian agriculturists.

In this connection and in order to head off an old and time worn argument, it may be at once admitted that the keeping of livestock implies work and that those, whether men or boys, who are averse to a reasonable amount of it, had better leave the business alone. Work and drudgery are, however, two entirely different things and the latter is nowadays no more necessary on the modernly equipped and well managed stock farm than anywhere else. As a matter of fact the work of intelligently caring for good animals is one of the most interesting and attractive pursuits in the world as will be readily admitted by anyone who has ever been intelligently engaged in it, whether on his own behalf or not.

I need not at this time dwell at any greater length on the importance of the general adoption in this country of the principles of sound husbandry, and particularly of the keeping of livestock.

Knowing as I do that the action of the Canadian Pacific Railway Company in establishing a branch of Animal Husbandry in connection with its Department of Natural Resources has aroused some little interest, and as this is perhaps the most fitting occasion which has yet presented itself for an explanation in this regard, I will with your permission refer to a few of the lines of activity which we propose to follow.

Before doing so however, I would like to be understood that for the present season at least, it is the intention to confine our operations almost entirel yto the irrigation belt, lying east of Calgary. The reasons which led to the adoption of this temporary limitation are as follows:

First, the need of creating such an organization as will be capable of doing effective work on the extended scale necessary in order to make any definite impression on the enormous area comprised by these western provinces, this organization if it is to do really good work will demand the employment of a considerable staff possessing qualifications for the various lines of work which it is proposed to undertake; men of the stamp required are not very plentiful and in order to avoid disappointment, they must be selected with care and caution.

Second, it is always well to follow the line of least resistance and as the people of Alberta, and particularly those in the district surrounding Calgary are, for various reasons, already favourably inclined to livestock husbandry, our earlier efforts are likely to be more successful here than elsewhere.

Third, better results are certain to follow the concentration of our energies within a circumscribed area than if these were extended and to some extent dissipated in the attempt to cover the whole of the west. If successful in improving conditions to any considerable extent in a given district, even if not very large, we will have furnished a valuable object lesson.

Having made this explanation, I will endeavour to briefly enumerate a few of the more important features of the campaign which it is proposed to carry out.

The first of these is the supplying to settlers of livestock of such kinds and in such numbers as are likely to be most profitable and of the greatest assistance to them. This stock will consist very largely of good grade females of the different species, to be sold to the settlers on easy terms and under such conditions as regards maintenance and supervision as will provide reasonable safeguards against avoidable loss.

It is also proposed to encourage the use of pure bred males in every district where these grade females are located. In the case of the smaller animals, males will be sold to the settlers on easy terms, but in the case of bulls, it is the intention of the company to retain ownership of the animals by simply placing them in the hands of responsible men in selected districts, authorized to collect small service fees, in order to recoup them for any trouble or expense to which they may be put.

I may say that so far as this district is concerned a strong effort will be made to stimulate the production of dual purpose cattle of the dairy Shorthorn type. Bulls of this type will be introduced wherever possible, while as many Shorthorn grade females of milking strain will be distributed as possible. Owing to the difficulty of obtaining these in Canada in any great numbers, it is the intention to also utilize grade Ayrshire cows, which, crossed with the dairy Shorthorn bull, will produce very useful dual purpose cattle.

A considerable number of cows carefully selected in the east, have already been distributed while we have also brought in over forty head of pure bred dairy Shorthorn females, and a number of bulls. The pure bred females and such bulls as may be necessary, are to be used in the formation of pure bred herds in different localities with the view of producing for future use stock of this class at the lowest cost and possibly of better quality than could be obtained from other sources.

With the object of encouraging the younger generation in the keeping of live stock, we have inaugurated a steer feeding competition, open to sons of farmers situated on the lands of the company within the Irrigation Belt.

Such of these lads, as on investigation, are found to be reasonably well equipped for the work will be furnished with six or eight steers to be fed during the coming winter. Prizes will be awarded at the Calgary Spring Show to the four lads who succeed in adding most to the weight of the animals during the intervening period.

At the same show it is proposed to offer handsome cash prizes for the best lots of fifteen steers, there being classes, animals three years and over, steers two years and under three, and steers one year and under two.

Prizes will also be given for the best sixty fat wethers and for the best fifty fat hogs, not to exceed two hundred pounds weight, and the best fifty fat chickens.

This last mentioned competition differs from the steer feeding competition above mentioned, in being open to all comers.

I am also arranging for the foundation of an animal rescue mission by negotiating with the larger packers for the purchase from them of such serviceable young females of the different species as may for any reason be found among the stock intended for slaughter.

One result of the continued and widespread world shortage of beef cattle has been the passing in several of the South American Republics of legislation prohibiting slaughter of cows under five years old, while laws of this kind would not be looked upon with favour with our people, I feel it my duty to impress upon every one the necessity of discouraging and preventing as far as possible the slaughter of stock of this kind. It is scarcely necessary for me to dwell upon the absurdity and lack of common sense involved in the importation of breeding stock from eastern Canada at great expense, when the train conveying them may between here and Winnipeg cross several trains carrying useful young females to that city for immediate slaughter.

It is also proposed to take up during the coming winter the work of endeavouring to form co-operative circles among farmers for the buying, breeding, handling and above all the selling of live stock. In this work and partly for the sake of example, it is the intention to co-operate with the Dominion and Provincial Departments of Agriculture at the various series of meetings held during the winter months, and I have every reason to hope that we will also have the valuable co-operation and assistance of the United Farmers of Alberta and of the Grain Growers Association.

Every effort will be made to prove by demonstration that mixed farming is highly profitable when carried on under proper and favourable conditions. In this work it is the intention to utilize the various Demonstration Farms now in existence and to be established by the company in different localities; it is also proposed to use the press freely, and to deliver public addresses wherever these may be given with advantage.

Last but not least is the project of providing at different points throughout the west open markets on which the producer of live stock may feel sure of obtaining for what he has to sell a fair and equitable price on a parity with actual values in the markets of the world, subject only to such limitations as are right and proper in view of transportation and other conditions.

There is every reason to believe that in this work it will be possible to secure the hearty co-operation of all the transportation companies operating in these western provinces, and although it may take some little time to place matters on a satisfactory footing, there is good ground for the hope that by the time the local supply again exceeds the local demand, conditions in this regard will be vastly more satisfactory than in the past.

In conclusion I would say that as most of you know, I am not much addicted to boasting even of things accomplished. Most of the features of the programme which I have just outlined are as yet only in their beginnings. I do not wish to be understood as predicting success for them all. It is however better to aim too high than too low, and while there may be disappointments, there will always be the satisfaction which follows earnest endeavour, even if results fall short of expectations.

CARE AND MANAGEMENT OF THE SHEEP STOCK.

(By Mr. John A. Turner of Balgreggan Stock Farm, Calgary.)

In opening his address, Mr. Turner laid great emphasis on the importance of the sheep industry. He said that we have the best sheep country in the world. He then drew attention to the fact that sheep were man's best friend.

They not only feed but also clothe him in the best possible garments. "But," said Mr. Turner, "a man who makes a success of sheep can make a success of any other business."

To succeed with sheep the greatest attention must be given to details not only to feeding but also in general management. Mr. Turner went on to impress his audience with the important part that sheep in conjunction with other live stock played in keeping the boys on the farm. He maintained that districts where live stock prevailed in large numbers were much more progressive than those in which grain growing predominates. This in itself was a splendid argument in favour of mixed farming. In discussing the flock Mr. Turner said that it was the better policy to have a relatively small flock that could be properly looked after rather than to have a large one that received poor attention. He said that too large numbers in the flocks was the worst enemy to sheep husbandry. In selecting a flock it was most important to choose a breed that was adapted to the climate of your country. In this connection Mr. Turner said that the close woolled breeds were more suitable to Alberta than the loose, open woolled breeds. This was on account of the frequent falls of light dry snow; these were not able to penetrate and wet the former nearly so readily as the latter.

The speaker went on to emphasize the importance of a good ram in the flock. He said that it was mighty poor business to economize by saving a few dollars when buying a ram. In a discussion that followed, Mr. Turner said that a young buck could serve 25 ewes and an old one more than this number with good results. It had been said at a meeting of the ranch commission that where sheep pastured no other animal would. On his farm he had run cattle, horses and sheep together, and they all thrived till there was no grass; then only the sheep continued to thrive. This was because they were able to eat the grass closer to the ground. He had also fed his ewes well during the winter on cut green feed and whole oats. Such ewes gave better and stronger lambs than those that were poorly fed. Having fully dealt with the sheep question, Mr. Turner next gave a few general remarks on farm operations. He advised people to sow what they intended for green feed early in April. In following such a plan the crop may be cut before it is frosted and when it is just beginning to turn yellow. This practice enables the farmer to harvest the feed early and clear the land ready for plowing in the fall. "Green feed," says Mr. Turner, "is a very valuable crop when properly used and is not dangerous when fed pregnant animals." By cutting the straw and green sheaves previous to feeding, considerable is gained. His feed is not only cut but is also sprayed with water a day before feeding to moisten and soften it. A little salt used on this cut feed makes it more palatable. In feeding, the great secret is to change feeds frequently or at least have quite a variety. Such a factor determines in no small degree the economy in feeding.

Concerning the marketing question, Mr. Turner believed that it was most essential for every man to have as far as possible a special market for his produce. He quoted as an example of the benefits to be derived from such a market, a case of a young man near Edmonton who was selling mutton to a couple of hotels in that city for 14c per pound.

In order to help the sheep keep down the weeds, and to conserve moisture, Mr. Turner summer fallowed every third year. Five years ago he had sown five acres to alfalfa. Mr. Fairfield's instructions had been followed very closely. The seed was sown in early June on land that had been summerfallowed the previous year. The soil received a small application of inoculated soil that he had procured from the Lethbridge experiment station. Since the alfalfa has been growing on his farm it has been up against some very trying experiences. But in spite of these it keeps on improving each year. The drought does not injure it materially. The sheep clipped it off very short last fall just before the freeze up, but, in spite of adverse circumstances he had received a great crop this year. Twelve double loads were taken from the first and nine from the second cuttings.

In answering a number of enquiries concerning green frosted feed causing abortion, Mr. Turner was of the opinion that it was frequently other causes than feed that were responsible for the loss of so many foals. Pink eye that struck pregnant mares invariably caused them to abort. The speaker said that a severe shock or a nervous strain due to other causes sometimes were the unknown cause of such losses.

FEEDING STEERS.

(By H. A. Craig, B.S.A., Superintendent Alberta Government Demonstration Farms.)

I am very pleased this afternoon to have the opportunity of placing before you the results which we obtained in feeding steers at the Government Demonstration Farms during the past winter. It is not my purpose to inflict a lengthy address upon you, but rather to give a plain short talk upon different phases of the work. While our results may not have been extraordinary, they were such as satisfy us that the business of finishing range steers in an enclosure is a practical one and one which will give fair returns for the money invested if proper methods are adopted.

I am not going to touch upon the place that steer feeding has or should have in the agriculture of this western country. Mr. Hutton, I believe is going to talk upon that feature of the business, and is much better qualified to do this than I am, having had several years experience in feeding. I realize that our experience so far has been limited, having extended only over one year and I am going to give you only the results and observations which are plainly manifest. These observations are taken from the feeding of about 200 steers at three different farms last year with different conditions at each farm and also from the feeding of about 400 steers this winter at four different farms.

I wish to deal with three phases of the work:

(1) Selection of Steers.
(2) Feeding and Handling.
(3) Results Obtained.

There is no doubt that the day you cut your steers for the feed yard is the day you make your money. I realize as well as anyone how difficult it is to secure steers of the right kind. It is quite an easy matter to go out and pick up a couple of hundred steers of all descriptions but our experience has been that there can easily be an actual loss in weight on certain steers after having been fed on the same ration and under the same conditions as other steers which put on 250 pounds weight in six months. The question naturally comes what kind of steer to feed. I am not able to give you as full information on this as I would like to but I am going to give you what we have been able to observe.

The steer which anyone will discard of course is the rough, loose, leggy steer without much middle, with the thin long head and horns to match. It is not necessary for me to discuss this animal as there is no one who would feed one of this kind.

The next kind of steer to beware of is the wild one. Do not misunderstand me here. A bunch of steers may be wild, most range steers are wild especially when a man goes around on foot amongst them, but I mean the one steer in the bunch whose eyes will stick out of his head and will gallop off around the bunch like a mad thing as soon as you commence to work in the yard. It is not so much the actual loss in feeding a wild brute of this kind because he will not gain much, if any, but he will make the whole bunch restless. Then when you come to deliver your bunch in the spring this steer goes out of the yard with a kick and a bound and away across the prairie looking for something to frighten at and of course the bunch follow with the consequent shrinkage and loss to the feeder. This year we have cut back good steers just because they gave evidence of being wild.

The next steer I would watch for, is the diseased one, particularly lump jaw and in cutting a bunch it is easy for one of these to slip through Other animals will show signs of ill health by their coat and general lack of vigor. It is worth a good deal to have a thrifty looking bunch going in. I do not mean fat but simply in good growing shape. Speaking of general appearance brings me to the point of color. I never thought that color made much difference until lately, but we found that the white cattle in our bunch did not stand the cold as well nor did they put on nearly the gains that the darker colored steers did. Two of them actually failed, weighed less in the spring than in the fall. Another point with respect to color. We found that the Jersey colored steers did not do well, also the sort of dull yellow color or a black with a sunburned back did not do well. I do not mean that these animals had any Jersey blood in them but somehow the color indicated a lack of breeding which told when they got into competition with better bred steers.

Lastly I would get three year old steers coming four if possible. The younger steers do not stand the cold weather as well, will not stand the heavy feeding and will not make as heavy gains as will the older steers. Five year old steers made good gains but they are often the rough ones cut back by the buyer the year before and again they do not grow as much as the four year olds. And by the way I consider this quite important, the weight the steer will put on by actual growth. We fed some oxen last winter without much success. Fortunately we had only a few. Now from what I have said it might appear that all the cattle we fed could be classed in some one of the above mentioned, but I may say that these formed only a very small proportion as you will see when we come to speak of results.

The kind of animal I would feed. Let me direct your attention to the steer winning first place in the competition at this show. The thick, broad, low set contented looking type, carrying lots of flesh on top and with plenty of middle, with large heart girth and a broad short head, is the kind that did best with us. I realize that it is not always possible to get this kind especially in large bunches.

FEEDING AND HANDLING.

The quieter the cattle are to start with the sooner will they commence to put on gains, however when feeding is commenced the cattle soon tame down especially if all strangers are kept out of the yard.

A few words about the actual enclosures. In the first place the cheaper the better, provided it will hold the cattle. Two of our yards are located beside barns which give a certain amount of protection from the winds. On the north and west sides we have an 8 foot close board fence. On this fence we have feeding racks similar to those you see in almost any railway stock yard. They are built of 2x4 scantling placed about six inches apart. Our long feed is stacked just outside this fence and is fed over the fence into the racks. In the centre of the yards we have a long table with 8 inch sides on it for feeding cut feed and chop. I would make this table about 3 feet high and about 4 feet wide. It requires about 3 feet per steer allowing for steers to feed on both sides.

One bunch of steers were fed entirely in the open with a bluff for shelter. In this case we had a "V" shaped rack built for feeding the long feed and used the tables the same as in the enclosure for cut feed and chop.

To one of these lots of cattle we fed cut feed entirely, principally green oats and some wheat with chop in addition. A second bunch was fed all the sheaf oats and wild hay they wanted and cut feed twice a day with chop mixed. The third bunch were fed long feed including sheaf oats and wheat and wild hay, the chop being fed separately. The results were in favor of the cut green feed and chop mixed. Not much better however than feeding the long feed and also cut feed and chop mixed. The steers fed in the open with long feed did not make nearly the gains that the other two did.

One strong point in favour of mixing the chop with the cut feed is that each steer is more likely to get his fair share of the feed. Where the chop is fed alone the bosses get more than is good for them and the shy steers get none. Where possible it would appear to be advisable to separate the shy steers and the small steers from the rest.

With respect to the chopping of feed we made some tests. One lot were fed chop that was barely broken or crushed. Another was fed on chop fairly well ground and a third on chop ground pretty fine. Our test of course does not extend over a sufficiently long period to come to a conclusion as to which actually made the most gains but one thing was evident that the steers fed the coarse chop could be fed much more than either of the others without putting them off feed or affecting their bowels. The steers fed the coarse chop were quite easily brought up to 14 lbs. a day and held there while those fed the fine chop would barely stand 10 pounds a day.

The steers fed in the enclosure were fed the cut feed with chop. I may say that the chop was started at about 3 pounds per head per day and brought up to what the cattle would stand. In the case of the coarse chop the limit was about 14 pounds, the medium ground chop about the same and the fine ground about 10 lbs. The chop was started on the 1st of January and in about two and a half months the cattle were on a full ration. This chop consisted of oats and barley or oats and frozen wheat, ⅔ oats in each case. The frozen wheat did not give very good satisfaction. We have no definite figures to show but the cattle did not seem to do as well when the wheat was in the chop. The cattle at all times of course had access to lots of water and salt—a heater being kept in the water tank.

I would have you bear in mind that our results are taken from only one year's experience and while there are certain points which are plainly manifest from our work so far yet there are some points which only more work will clear up.

RESULTS.

Statement of Steer Feeding at Olds Demonstration Farm.

	Pounds.
Weight of 99 steers weighed out on May 29	142,062
Weight of 1 steer weighed out on January 17	1,350
Total weight	143,412
Weight of steers weighed in on October 30, 1911	127,540
Total gain in weight	15,872
Average weight of 99 steers weighed out	1,509
Average weight of 100 steers weighed in	1,275
	234

By sale of 99 head of cattle May 29 at $6.65 per 100 lbs.	$10,005.35	
By sale of one steer January 18 at $5.25 per 100 lbs.	70.70	
By gain in weight of 8 hogs running after steers, $9.00 per hog	72.00	
Total amount realized		$10,148.05
To price of 100 steers, 127,540 pounds at 4½ cents	5,739.30	
To interest on note, 7 months, at 7 per cent	234.00	
To feed of steers:—		
Grain	1,456.10	
Wild hay	468.40	
Green feed	498.00	
Salt	10.00	
Labor	700.00	
Gasoline used for cutting and grinding feed	30.00	
Total cost of steers		$ 9,135.80
Total net gain		$ 1,012.25

Net gain per head, $10.12.

Average selling price per steer, including profit of $72.00 made on gain in weight of hogs	$101.48
Average purchase price per steer	57.39
Gross profit per head	$44.09

The Claresholm steers not only cost $4.80 per hundredweight, but were sold at $6.60, or five cents below the Olds steers. This reduction in selling price is accounted for by the fact that there was more than one carload, but not enough to make two full cars, consequently the shipping expenses to the purchaser were higher per head. The net gain per head on the Claresholm steers is rather low, but the price paid—$4.80 per hundredweight—makes that difference. At the time it was determined to feed these steers at Claresholm, it was almost impossible to get cattle, and a rather high price had to be paid for them; but it is very important to show that you can pay nearly $5.00 a hundredweight for steers, pay also the interest on the money invested and still show a profit.

Statement of Steer Feeding at Claresholm Demonstration Farm.

	Pounds.
Weight of 22 steers weighed out on May 27	33,130
Weight of 22 steers weighed in on November 22, 1911	26,855
Total gain	6,275
Average weight of 22 steers weighed out	1,506
Average weight of 22 steers weighed in	1,220
Average gain per head	286

By sale of 22 head of cattle May 27 at $6.60 per 100 lbs.	$2,186.58	
By gain in weight of 4 hogs running after steers, $9 per hog	36.00	
Total amount realized		$2,222.58
To price of 22 steers, 26,855 pounds, at $4.80 per 100 lbs.	$1,289.04	
To freight from Pagan to Claresholm	14.59	
To interest on note 5 months and 8 days at 7 per cent	40.00	
To feed of steers:—		
Grain	227.00	
Green feed	316.00	
Wild hay	35.50	
Salt	2.00	
Labor	120.00	
Gasoline	15.00	
Total cost of steers		$2,059.13
Total net gain		$163.45
Net gain per head, $7.43.		
Average selling price per steer, including profit of $36.00 gain in weight of hogs		$101.02
Average purchase price per steer		59.26
Gross profit per head		$41.76

The Vermilion steers were fed under more disadvantageous conditions than those at the other farms. To start with they were a rougher lot. Then, again, they had the liberty of a 100-acre field with a bluff for a shelter, and when spring opened they did not make the gains that the steers did which were in enclosures. The gains do not appear as large as at the other farms, partly owing to the fact that they were weighed off cars, while the others were weighed at point of shipment. Even under these conditions a fair profit was made.

Statement of Steer Feeding at Vermilion Demonstration Farm.

	Pounds.
Weight of 69 steers weighed out on May 7	93,825
Weight of 70 steers weighed in on November 6, 1911	88,480
Total gain in weight	5,345
Average weight of 69 steers weighed out	1,360
Average weight of 70 steers weighed in	1,264
	96

By sale of 69 head of cattle May 7 at $7.00 per 100 lbs.	$6,533.25	
By gain in weight of 11 hogs running after steers, $9.00 per hog	99.00	
Total amount realized		$6,632.25
To price of 70 steers, 88,480 pounds at $4.75 per 100 lbs.	$4,202.80	
To freight from Fort Saskatchewan to Vermilion	93.00	
To brand inspection	3.50	
To interest on note from November 22 to May 17, 1912	151.01	
To feed of steers:—		
Hay	227.25	
Oats	300.95	
Barley	173.25	
Wheat	189.20	
Green feed	600.00	
Gasoline	27.71	
Labor	225.00	
Total cost of steers		$6,193.67
Total net gain		$438.58
Net gain per head, $6.26.		

Average selling price per steer, including profit of $99.00 gain in weight of hogs	$96.12
Average purchase price per steer	60.04
Gross profit per head	$36.08

The Vermilion statement requires some explanation before a fair comparison can be made with Olds and Claresholm. These Vermilion cattle were weighed in full and 'weighed out empty. Allowing for a shrinkage of 70 lbs. per head and for 20 lbs. per head for the steer that died, the average weight at selling time would be 1450 or a gain per head of 186 lbs.

FEEDING FOR BEEF.

(By G. H. Hutton, B.S.A., Superintendent Experimental Farm, Lacombe.)

Gentlemen,—I congratulate the management on the success of this, their first winter fat stock show. I appreciate the honour of having been asked to judge the fat classes at this first show and venture the opinion that the classes covered by a single judge yesterday and to-day will so rapidly increase in numbers that this work will soon require the services of many judges in various departments. In covering the classes I have been pleased to observe some remarkably fine exhibits. The car lots and steer classes are good and would give a good account of themselves at much larger exhibitions. I again congratulate the management on this satisfactory beginning and extend a very hearty wish for the same growth for this new show that has characterized other undertakings of this association.

My subject for discussion is the results secured from our experimental work at Lacombe in feeding for beef. I am glad to say that the results of all the feeding trials conducted at the Lacombe station have emphasized the special market that live stock affords for the grain products of the prairie. It is important to know that the recommendations given to farmers from almost every angle that they go into mixed farming are based on financial reasons. If it cannot be shown that mixed farming pays better than grain farming it is of little use to talk about maintaining soil fertility and insuring for future generations a heritage of unimproved soils. Sentimental reasons are scarcely sufficient to induce men to cease growing grain exclusively and introduce live stock on their farms if the latter system is not as profitable as the former one. I repeat that I am glad to say that our experiments so far have pointed strongly to the conclusion that live stock offer a much better market and insure a much larger profit for the farm crops than can be secured by marketing these crops directly through the elevator or mill.

We have fed steers for three years. The total equipment cost $128.96. This cost included scantling and boards for fence and hay racks, lumber in grain tables and water tank, tank heater, salt boxes and labor of construction. We have fed outside exclusively with the buildings and stacks as the only shelter. We picked up an average bunch of steers each year at the market price.

We fed in 1909-10 frozen wheat worth in the market about 35 cents per bushel. When this wheat was marketed viâ the live stock route it brought $1.28½ per bushel. Valuing the grain at market price plus the cost of grinding, prairie hay and timothy hay at cost, i.e., $6.00 and $7.00 per ton respectively, the profit per head 'was $14.35.

In 1910-11 a car of steers paid $6.00 per ton for prairie hay, 1 cent per lb. for chop, $1.00 per ton for straw, 3 cents per bundle for green feed and left a profit per head of $28.90. The oats marketed through the steers in 1910-11 brought 94 cents per bushel and barley per bushel $1.32.

In 1911-12 the carload of steers made a profit per head of $15.56. This profit was made after paying for brome hay at $7.00 per ton, alfalfa hay at $12.00 per ton, green feed (peas and oats cut green and cured for hay) at $10.00 per ton, chop at 1 cent per pound, straw at $2.00 per ton.

Such uniformly satisfactory results surely point to the fact that coarse grains can be marketed most satisfactorily through the live stock route. They prove that expensive equipment is not necessary to the successful feeding of beef cattle. They show that the man who having coarse grains on his farm selects to sell them through the elevator and to sell his steers unfinished in the fall is making a serious mistake and greatly reducing his annual profits. I would strongly recoommend every breeder of steers to finish his work and secure maximum profits from his efforts by selling his cattle in a finished condition.

MIXED FARMING.

(By Prof. W. J. Elliott, Superintendent of Agriculture, Canadian Pacific Railway Company, Natural Resources Department.)

It is with considerable pleasure that I accepted your secretary's invitation to address the members of the Calgary fat stock show, at this, their annual fair.

It was an especial pleasure to me, because I know that the stock business is the basis of all true agriculture. This has proven to be true in older sections of this country, and while the grain grower has had considerable sway in the west, yet to attain the highest development in agricultural matters, Alberta and western Canada must eventually come to the stock business. I care not what particular stock a man is interested in producing. All are necessary to the complete development of the West. No one man can say that his particular breed is the breed that should be accepted by all men, because there is ample room for the best product of all breeds.

As many of you know, we had the priivlege of accompanying the special mixed farming train, that was run all over the province by the Alberta Government, and I must say that I am thoroughly convinced that the running of that train has meant a very great deal to the stock industry of the west. The message of each man who was associated with that gospel train was, that the stock business must be the basis of all things agricultural. There was an intense eagerness on the part of a great many people to become familiar with the feeding and handling of stock, and yet one could not help but be struck by this feature, throughout almost the entire running of the train, that there was a dreadful dearth of good stock in Alberta. True, there are those who have splendid herds, and flocks of magnificent specimens, and this show today is a clear evidence that this is true, and yet when you take the thousands of farmers scattered over all the province, one realizes that a very large percentage of the farmers are not keeping very much stock, and that which they do keep, is of rather an inferior quality.

The real stock breeders of this province are doing a mighty work in the upbuilding of the province, because in the distribution of the best males from the good herds and flocks, they are scattering abroad the greatest force possible for the development of stock generally.

We have already pointed out that there is a considerable dearth of good stock in the province, and this fact, coupled with the fact that crops have not been of the best for the past two years, puts the average farmer in rather an awkward position. Many men would go in for better classes of stock, were it not that there is a scarcity of ready money to purchase even a few animals to begin with. Many farmers said, "It is all right for the educators in the province of Alberta to preach the gospel of more and better stock, but, in the face of conditions as they are, it is difficult for the average farmer to purchase that stock." My reply to this was to the effect that I had no idea of advising men to spend large amounts of money in the selection of herds of cattle, brood mares, or flocks of sheep. My idea was rather that men should get into stock in the easiest way possible, and to my way of thinking, there is no better way for a man to get started in the stock business, than by securing a few good brood sows or a few sheep. Hogs are prolific, and it is surprising how quickly a man will get a large number of hogs about him at very little cost if he will take up the matter in the right way. My opinion is, that men should secure a few brood sows, due to farrow early in the spring, and then by providing a few acres of the various grains and grasses, in the way of pasture, the litters of pigs may be raised very economically indeed. Then, by selecting the best brood sows again, and carrying this process through to the second year, a man will have practically all the stock that he can care for on a small farm.

Grain is grown so cheaply in the west, and the grain that is grown makes such excellent feed, that we can produce pork, mutton and beef in competition with any district on this continent. We all know, there is not enough produced in the country to supply our own demands, hence what is produced will find a ready local market, and so far as I can see, this scarcity will continue for the next ten or fifteen years, because people are coming into the west so rapidly, that the herds and flocks of the west cannot keep pace with the ever increasing demands of the newcomer.

There is another matter that I should like to discuss for a short time at this meeting, and that is, the condition of our markets at the present time. We all know that the prices that are being obtained for grain are ridiculously low. This, too, in the face of the fact that we have had rather indifferent crops in western Canada for the past two years. The drought condition of 1910 was one that prevailed generally all over the western states and western Canada, and to have the conditions of that year followed up by rather a small crop during 1911, must have left the grain on the world's market rather short.

Now, 1912 produced a very good crop. Yet, in spite of the fact that the two previous years were short, and consequently, the grain on the world's market somewhat short, the prices obtained in 1912 were disgracefully low. It has simply put the question in my mind, as to whether or not there is some great force manipulating the market, and keeping the prices low, until the grain from the west is marketed. In this connection, it will be interesting to watch the prices that obtain for grain, next spring.

This line of thought has led to the conclusion that something should be done in the way of assisting the farmers to get a fair price for their produce, after it has been grown.

Agricultural Colleges, Experiment Stations, and all corporations interested in the development of agriculture, have done much to show the farmer how to grow larger crops, and how to better cultivate his soil, and yet, with all the economical handling of the soil, and with all the larger crops that have been produced, so far as we know, no government, no experiment station and no corporation have taken up the question of showing the farmer how to obtain a better market for the produce that he does grow.

The province of Alberta, through her agricultural department, has come perhaps nearer to giving assistance in this line, than has any other government or corporation that we have any knowledge of.

Through Mr. Marker and his able corps of assistants, the province of Alberta has undertaken to market the dairy produce from the government controlled and private owned creameries. There is no question of a doubt but that they have been eminently successful along this line. Now, if the government can be so successful and can bring such splendid returns to the farmers, through marketing the dairy products, why can the province not be just as successful in giving assistance in the marketing of other farm produce.

I am quite sure that the education of the future must include education and assistance to farmers in the marketing end of their business.

I do not believe that the government or corporation could actually buy all the produce from the farmers, but I do believe that they could put keen business men into positions where they could keep the farmers in touch with the best markets for the various classes of produce. The more nearly the farmer and his produce can become acquainted with the man who has to use that produce, the better prices will the farmer obtain.

We all admit that the backbone of the country is the agricultural industry, and yet, economic conditions as they are today, are such, that the farmer is not getting a fair return for the labour and sweat that he puts into the production of his grain and stock.

THE MUTTON SHEEP.

(By R. S. Hamer, B.S.A., of the Live Stock Branch, Ottawa.)

Mr. Chairman and Gentlemen,—In appearing before this meeting this afternoon I would like to express at the outset my appreciation of the pleasure thus afforded me of becoming better acquainted with the members of the Alberta Sheep Breeders' Association. I have, in the course of the past few years, had the advantage of travelling over much of the settled part of your province and for one season, in fact, had my headquarters in Calgary, but this is the first time it has fallen to my lot to appear on the public platform before a gathering of Alberta stockmen.

In inviting me to give a brief address, which should be of interest to the sheepmen of the province, your secretary has assigned to me a task, which I realize is by no means an easy one. Probably, in no other province of the Dominion are to be found such favourable conditions for the development of systems of sheep raising varying so widely in their nature and methods as are to be found within the boundaries of the province of Alberta. The grazing lands of the south, the slopes of the foothills and the sheltered valleys of the mountains have already, to a certain extent, proved their possibilities for sheep ranching. The irrigated country offers opportunities as yet scarcely realized by the sheepmen while in central and northern Alberta, in that immense area by nature adapted to mixed farming, a few farmers scattered here and there have come to appreciate the importance and, in some cases, the actual necessity of keeping sheep. In the time which is allotted to me this afternoon it would however be futile to attempt to discuss all the phases of the sheep industry represented in the province and as the interests of the mixed farmer and the grain grower are undoubtedly more fully represented here today than are those of the ranchmen, I propose to confine my remarks to the mutton side of the business.

It is well known to everyone here that the question of meat supply in Canada is a very different one from what it was ten years ago, but it may not be known to all of you that this is rapidly becoming the most important problem associated with the live stock business in this country. We are accustomed to thinking of Canada as a great food producing country and of speaking with pride of our export trade in farm products. It is true we have held for years an important place on the British market and that we still stand well up in shipments of some lines of agricultural produce. It is also true that we are primarily an agricultural country and that our resources in this respect are almost immeasurable. At the same time, it is rather disconcerting and, in fact, almost alarming to get down to a consideration of actual facts regarding our meat trade. It is only a year or two since the fact began to impress itself upon those in touch with the situation that Canada is on the verge of failing to supply her own demand for meat products. The situation today is one of very serious importance and demands consideration not only of the special live stock interests but of the general farm problem. It is a fact that Canada is still an exporting nation of beef, but even a superficial knowledge of conditions throughout the country and but a brief consideration of export figures is sufficient to convince anyone that at the present rate of decrease in supply only a short time will elapse before our cattle export trade will be a thing of the past. The receipts of the leading markets have been falling off from year to year for the past five years, particularly of course in the west. In 1909 the beef receipts in Montreal and Toronto fell 3% and 8%, respectively, as compared with 1910, while the receipts of Winnipeg dropped from 190,000 to 102,000, a falling off of 46%. In other words, there were 17% fewer cattle received at these leading market centres in 1911 and 1910. The falling off of the cattle forwarded east from Winnipeg is indicated by the following figures:

	1910	1911
Exporters	48,511	10,356
Butchers	39,750	16,875
Feeders	32,191	5,411
Total	110,452	32,632

Increased shipments into British Columbia have, no doubt, accounted in part for the shrinkage of the receipts at Winnipeg, but it is very evident that the passing of the ranch has greatly decreased the margin between the supply and demand for beef in Canada. This fact is still more clearly shown by export figures. Whereas in 1909 we exported 154,000 head, the number dropped to 102,000 in 1910; while in 1911 we exported only 54,000 and for the first nine months in 1912 only 18,000. As 11,000 cattle are annually imported into Canada, it is clear that we are rapidly approaching the point where our exports will not balance our imports.

While the time appears to be rapidly drawing near when Canada will cease to meet her own demands for beef, we have already passed the point where mutton supplies kept pace with demand. At one time Canada exported sheep and lambs in large numbers. For instance, in 1895 from the port of Montreal alone 201,000 were exported and even as recently as 1907, 130,000 were shipped out of Ontario to Buffalo. In 1909, however, Canada's export trade dropped to 50,000 head and last year only 7,232 head were exported. And this is not all; while our shipments in mutton have been steadily falling off, our imports have been rapidly growing. During 1909 our imports of live sheep were 38,000, of which 37,500 were received west of Port Arthur. The next year the number was 73,500, of which 71,700 went to the west. In 1911, we imported 180,000 and of that number 160,000 came into western Canada. Even this number does not supply the western trade, thousands of sheep being brought west from Ontario and Prince Edward Island. In addition to this we find a steadily growing import trade in dressed mutton, directed almost entirely to the western market. During the past three years our imports of dressed mutton have been 1,431,000 lbs., 2,094,000 lbs. and 3,410,000 lbs., respectively. To express the facts regarding our mutton import trade in a form more readily grasped, I might say that last year there were imported into Canada either as live animals or in the form of dressed mutton several thousands more sheep than are today to be found in the whole of the province of Alberta. In view of our increasing population and the increasing popular demand for mutton and taking into consideration the uniformly good prices which have ruled during the past few years, it is a matter of surprise that the much talked of decline in the sheep industry has not been arrested ere this. As a matter of fact, Canada has fewer sheep than she had forty years ago, and even during the past five years her sheep population has been declining at the rate of 100,000 to 120,000 per year. Today we have about 2,300,000 sheep in Canada. This number looks very small indeed compared with the 105,000,000 of Australia, the 79,000,000 of the Argentine and the 28,000,000 of New Zealand. Even the small congested area of Great Britain supports 32,000,000 sheep.

The sheep population of Alberta has remained almost stationary for the past three years at approximately 180,000. Two years ago it was estimated at 162,000. Nevertheless, there are many reasons which should tend to encourage the mixed farmer to establish a flock of sheep and which indicate that a very material increase in the sheep population of the province cannot long be delayed. In the first place, we have in Alberta natural conditions of topography, water, shelter and climate than which there are none more favourable for the production of mutton in the whole of the west. In the second place, there is even in the best years in this country a great deal of inferior grain which it is almost impossible to dispose of profitably, to say nothing of the difficulty which is experienced in getting a remunerative price for the better grades in years of profitable crops. In the form of mutton this grain could be disposed of with profit and, as already pointed out, there lies on either side and right at home a large and growing market as yet supplied largely from outside points. It is true that to secure the most from this market organization will, doubtless, be necessary, but the fact remains that thousands of dollars are annually going out of the province and out of other provinces in western Canada for mutton, the greater part of which it should be the business of the farmers of Alberta to secure for themselves if possible. Finally there is the weed problem, one of the most serious confronting the western farmer today. As settlement of the prairie country has been pushed westward weeds have followed. Districts which have been settled longest are the worst polluted and it is but natural that this province does not yet feel the effect to the same extent as does Manitoba and eastern Saskatchewan. Take for example the pernicous and all too common pest, wild oats. The Conservation Commission of Canada reports that of every one hundred farmers interviewed in western Canada, the following percentages have reported the presence of wild oats on their farms::

In Manitoba	94%
In Saskatchewan	60%
In Alberta	31%
In British Columbia	19%

The commission found on every hand where sheep were kept fewer weeds and better grain crops. One man reported that during one year when his neighbours were docked from two to seven bushels per load of wheat his certificates generally read "No dockage" and never over 1%. Summer fallows, roadsides, fenced corners and waste places are the propogating grounds for weeds. A flock of sheep would not only keep them in check, but would actually eradicate them, to say nothing of the beneficial effect they have in packing the fallow.

In the case of annuals or weeds that grow yearly from seed, if sheep are turned upon them while young these weeds will never get a chance to seed. Amongst perennials they are equally useful, as they nip the stalk below the crown in their endeavours to get at the roots. These roots are to sheep what celery is to the human race.

In America six hundred weeds and grasses grow and, of this number, cattle eat fifty-five; horses, eighty-three; sheep, five hundred and fifty. This fact alone should cause the wheat grower to stop and consider not whether he should keep a flock but rather if he can afford not to keep them. Farmers have been forced to go into sheep raising ere this to help rid their farms of the weed curse. To this add the abundance of cheep, coarse grain unfit for market coupled with a keen demand for mutton products and even the prejudiced must admit that there are attractive possibilities in sheep for the grain farmers in Alberta.

The markets in western Canada are not subject to the fall gluts which always tend to reduce prices during October and November in Montreal and Toronto. During the past two years the market for lamb in the west has rarely fallen below five cents for tops and this year has been nearly six cents. At the present time the market quotations for lamb at Calgary are higher than in any other leading market in Canada. Notwithstanding the uniformly good prices which may be commanded here for well finished lambs at any season the question as to whether it will not pay to feed for the spring market is an important one and one worth considering from the standpoint of securing profitable returns for waste grain. Now that alfalfa is being grown extensively in irrigated districts and profitably in other sections a suitable combination of feeds may be secured. If provision is made to supply roots to give succulence to the ration, greater gains and a better finished product will result. Probably it is asking a good deal of the western farmer to suggest that he grow roots but no one who has tried it will deny that they fill an important place in winter feed for sheep and that they give very profitable returns. The experiment conducted at Lethbridge last winter where 250 lambs were fed for sixteen weeks is specially interesting in this connection. I see here today Mr. Grisdale who had charge of this experiment and with his permission will refer to some of the results secured. These lambs, which averaged 79 lbs. at the beginning of the experiment, were divided into five lots of fifty each. All were fed alfalfa for the first two weeks. The first lot received alfalfa and screening for the remainder of the time; the second alfalfa and meal; the third alfalfa, roots and meal. The fourth lot received alfalfa and roots, to which meal was added at the end of ten weeks. The fifth lot were fed alfalfa alone up to the end of ten weeks, after which meal was added. The profits ranged from $1.20 to $1.56 per head, exclusive of rent and labour charges. The effect of roots upon the finish of the two lots to which they were fed was very evident. Lot No. 3 made the best gains, and were the best finished at the time of marketing. Their average gain of 36 lbs. per head for the period was, it is true, not made so economically as the gains of some of the other lots but nevertheless, they gave a profit of $1.23 per lamb and their superior finish undoubtedly assisted in securing a good price for some of the other lots. While alfalfa and screenings gave a profit of $1.58 per head, this lot made the poorest gains and were not well finished. Alfalfa and meal alone proved a more expensive ration than any of the others, but resulted in a well finished lot of lambs. Lot five, which was fed alfalfa alone for the first ten weeks, gave poor results until the meal was added. All of the lambs were sold in the spring at 6¼c, less 5% shrinkage. The feeds used were charged at the following prices:

Roots		$ 2.50 per ton.
Meal	2 parts oats 2 parts wheat 2 parts bran	$20.00 per ton.
Alfalfa		$10.00 per ton.
Screenings		$ 5.00 per ton.

One of the greatest difficulties to be contended with in sheep raising in the west is undoubtedly the depredations of coyotes. For small flocks, fencing appears to be the only remedy. Where it is possible to guard the sheep during the day a well fenced corral for protection at night may suffice. While a six to eight strand fence will hold sheep, ten to twelve strands will be needed to keep out coyotes. Such fences should be forty inches high and are better if fifty-four inches in height. The first will cost about 40c per rod and the second about 55c. Posts should be 25 ft. to 30 ft. apart with the corner post set 4 ft. deep, with braced panels at each corner and at intervals of about 40 rods. Our enquiries indicate that where such fences have been built in the west the cost is estimated by the owners at an average of $300 per mile with labour included or $150 per mile labour excluded.

I see that I have already consumed probably more than my share of the time of this meeting and as some points which I had intended to touch upon with reference to selection, care and management have already been very fully dealt with by previous speakers, I will pass on to one final point, which is too frequently neglected by sheepmen all over Canada and particularly in the west: that is dipping. The object in dipping is first, to get rid of ticks and lice which torment the animal and absorb nourishment; second, to cleanse the skin and prevent scab and skin trouble; third, to increase the growth of wool. In flocks which are dipped regularly in the spring and fall for two years the wool clip for the following season should be increased by two pounds per fleece. There are many dips on the market, some of which are excellent and some of which are poor and should not be used. Of the latter, tobacco dips are an example. They stain the wool and, in addition, the nicotine is absorbed by the skin. Pitch tar dips also spoil the wool. The lime-sulphur dip is the official dip for scab, but should be used only in cases where it is prescribed as a cure for this trouble as it discolors and otherwise injures the fleece. For spring dipping poisonous dips have several advantages. They kill all ticks and lice and, in addition, remain in the fleece for a sufficiently long time to be effective as the eggs of these pests are hatched out. Non-poisonous dips, on the other hand, kill only such insects as may be on the animal at the time of dipping. In addition, poisonous dips prevent scab, condition the blood after the long winter and open the fleece, making it lofty and fluffy for showing. For fall dipping the carbolic or coal tar dips are usually recommended, as their action on the fleece is the opposite to that of the poisonous dip, tending to waterproof it and make it less pervious to snow and rain. While inexpensive dipping tanks may be built or purchased, a saving may be effected by several neighbours co-operating, where such is possible, in the building of a larger tank with conveniences which will facilitate putting through large flocks of sheep quickly. Plans for such dipping tanks may be secured at any time from the Live Stock Branch at Ottawa.

ADDRESS BY R. G. RICHARDSON OF THE P. BURNS CO.

As most of the feeders are well aware, steer beef always commands the highest market price from a butcher's standpoint. The reason for this is that the meat is of a much finer flavour, firmer and the fat is more evenly distributed throughout the carcass than is in the case with cow or heifer beef, therefore steer beef cuts to a greater advantage to the butcher than does cow beef.

Take for example a carcase of steer and likewise a carcase of cow, cut up these two carcases and to the inexperienced eye, the difference is plainly perceptible, whereas in the flesh of the steer, the fat will be distributed through the lean meat, making same rich and juicy and whereas in the cow beef, the fat will lie in chunks in different parts of the carcase, this fat lying as it does simply means a loss to the butcher, as there are very few of his customers who care to eat or even buy a solid piece of fat.

I do not wish the feeders of beef to take it that it is not necessary to feed their cattle to a state of perfection, but I do say there is such a thing as overfeeding from a butchers' standpoint. We will take for instance, even in the markets of Europe, where the people look for fat beef and where it is customary for the meat markets in the cities to purchase the prize winning animals at the Christmas fat stock show, this in my estimation and in my experience, has not been a profit making scheme from the sale of this beef, but from the advertising derived from this source, as the amount of fat trimmings from these cattle eventually find its way into the rendering kettle and the butcher never realizes the amount of the purchase price through the sale of the meat.

Weight, that is the dressed weight—From a butcher's point of view, what we require are cattle weighing from 600 to 700 pounds, the reason for this is simply that it is impossible to cut heavy cattle to advantage from a retail standpoint on account of the cuts from these heavy cattle being too large for family use. To explain my meaning more fully, you will readily see that a small roast from one of these cattle is simply nothing more than a steak, that is to cut up these cattle in the regulation way. I might also add that cattle brought to maturity early will always have a much brighter appearance than old cattle. I refer to cattle four or five years old.

MUTTON AND LAMB.

What applies to beef to a great extent applies to mutton insomuch that the trade requires a sheep to weigh between 45 and 55 pounds dressed. It is necessary from a profitable standpoint that the type of sheep be of a long backed variety, this gives the butcher the long rack from where all the prime chops and saddles are derived. It is not necessary however, for breeders to take exception to the term "long" to such an extent as to cause a weakness in the raising of this particular type.

Lamb.—Regarding lamb, I would suggest that breeders put forth all efforts possible to mature lambs as early as possible. It is not necessary for me to say that lamb that can be matured and put on the market around Easter commands the highest price of any time of the year.

HOGS.

Packers or Medium Fat Hogs.—In either of these varieties my advice to farmers is to raise hogs, then raise more hogs. The demands for hogs in Alberta today is far in excess of the supply, the result is that the packers have not yet got so far as to pay particular attention to the grading of hogs weighing between 150 and 250 pounds live weight. Of course very heavy rough hogs are graded on any market, but we must not lose sight of the fact that there is a good market in Alberta for all the hogs that can be raised.

Type.—Now to come back to the breed or type that the packer requires, the most suitable is the hog weighing in or about the weight stated above, having long deep sides, nice sloping shoulders and good round hams. Care must be taken that the breed be of a fine or thin skinned variety. This class of hogs will always have the preference on any market, as from this hog, the packer gets his choicest meat.

I wish to express thanks on behalf of the Alberta Live Stock Associations to yourself for your attendance to officially open the show, and to the various speakers whose addresses added very greatly to the educational value of the show. We hope to increase the effectiveness of this part of the show each year.

We trust it will be possible for you to publish the various addresses so that the information given therein may be available for those unable to attend the show.

Respectfully submitted,
E. L. RICHARDSON,
Secretary and Managing Director.

APPENDIX F.

SEVENTH ANNUAL REPORT OF THE ALBERTA HISTORY SOCIETY.

HON. DUNCAN MARSHALL,
Minister of Agriculture.

SIR,—I have the honour to submit herewith the seventh annual report of the Alberta Natural History Society for the year 1912.

The annual meeting of the society was held in the council chamber, Red Deer, on Friday, November 29th, 1912.

The president, Dr. H. George, Red Deer, in the chair.

PRESIDENT'S ADDRESS.

The president gave a brief address welcoming the members to the meeting and reviewing the incidents of the past year. While the progress of the society had not been up to expectations during 1911, he was glad to say that steady progress had been made during 1912, and prospects were very encouraging. There was not much in the way of observation notes that was new. He would draw attention to the persistent efforts of Mr. Brown in his search of prehistoric remains in the Trochu Valley; his efforts have been marked with deserved success, though we as a society would decidedly object to these valuable relics leaving the country and being deposited in the Museum of New York. The last find made by Mr. Brown was a complete specimen of an animal hitherto unknown to science, and its estimated value is $70,000.

Prairie chicken have become plentiful, no doubt owing to protection by the government, so plentiful indeed that in some places crops have been damaged by them, causing the farmers a loss.

Capt. Cottingham reports that he has shot a very rare specimen, an albino teal. Albinos have been obtained in the other classes, but this is the first albino teal so far secured. The captain has the specimen mounted and placed among his valuable collection of trophies.

REPORT OF THE SECRETARY-TREASURER.

In connection with the work of the society it was decided that prizes should be offered at the agricultural shows this year at Red Deer, Innisfail and Erskine as follows:

1st and 2nd for Collection of Alberta Wild Flowers.

1st and 2nd for Collection of Alberta Insects.

1st and 2nd for Composition on "Bird Life in Alberta During the Summer Months."

Flowers.—to be mounted on cardboard 12x15 inches, showing the plant with—when possible—root, flower and seed; flowers to be named, with name of place and date of gathering.

Insects—including butterflies, moths, beetles, etc.; to be pinned in cardboard boxes and named as far as possible.

Composition on Bird Life—noting time of arrival, characteristics of birds, nests and eggs—to be written on one side of the paper only.

These competitions are open to school children in the different districts, each exhibit to be the bona-fide work of the exhibitor, and to bear the name and age of exhibitor. Due allowance will be made for age.

The prizes are as follows:

	Value
First Prizes:	
Alpine Flora of Canadian Rockies	$2.75
Entomology	2.00
Bird Guide	1.75
Second Prizes:	
Freckles	2.00
Reed's Flower Guide	2.00
Reed's Bird Guide	2.00

RECEIPTS.

To Balance on hand	$138.44
Grant to Society, April, 1912	100.00
L. B. Potter, fee	.50
J. S. Short, fee	.50
	$239.44

EXPENDITURES.

By G. R. Westland, printing	$ 6.25
L. C. Harry, typing	2.50
Postage	1.25
Stationary and sundries	3.05
Mrs. Hughes, Erskine, expenses to meetings	10.00
Mr. R. E. Fiske, expenses to meetings	4.50
Mrs. Keast, expenses to annual meeting	2.00
Rev. J. S. Short, expenses to annual meeting	3.50
Mrs. G. H. Good, expense of banquet	27.15
Mrs. George, sundries	1.70
L. C. Harry, typing correspondence and annual report	2.50
Red Deer Advocate, printing	4.65
Red Deer News, dodgers	2.15
Grant to Red Deer branch	10.00
Grant to Erskine branch	10.00
Balance on hand	148.24
	$239.44

Audited and found correct,

FREDK. M. ROGERS,
Auditor.

REPORT OF THE RED DEER BRANCH.

To the President,—I beg to submit the following report of the Red Deer branch for the past year just about to close. It has not been a very strenuous year with the Red Deer branch owing to various causes which need not be gone into just now. Still the year has not been altogether barren as will be seen by the list of interesting lectures reported below. And at the end of the year there is a promise of greater interest and activity in natural history work than was seen a year ago.

No annual meeting of the branch was held in 1911 and the old executive remained in office during 1912 until August, when Mrs. Wanless the Hon. Secretary-Treasurer, left Red Deer and was succeeded by Mr. H. G. Munro for the remainder of the term.

The following lectures were given in the Red Deer public school:

Jan. 23. On Radium:—by Principal McKenzie, B.A.

Feb. 6. Mountain Climbing:—by Prof. J. E. Bouce, of the Alpine Club of Canada.

March 12. Game Preservation:—by Capt. W. H. Cottingham, Dominion Land Agent, Red Deer.

May 7. Natural history notes from the District of East End, Sask.—A paper communicated by L. B. Potter, Esq., of East End.

July. Some notes on the Natural History of a Winter Tramp up Sulphur Mountain, Banff:—Paper coommunicated by N. A. Sanson, Esq., Curator National Park, Banff.

Field Day. On June 1st the society had their first, and unfortunateately the only field day that it was possible to hold during the summer. The gathering was much enlivened by representatives from the Innisfail Branch, and a very enjoyable afternoon was spent and some 64 botanical specimens collected.

At the annual meeting held on October 29th the following officers were elected:

President.—Dr. H. George.

Vice-President.—Mr. S. Pamely.

Secretary-Treasurer.—Mr. E. Wilton.

Executive Committee.—Mesdames George, Green, Cottingham, Pamely and Tallman, (together with the officers.)

INVENTORY.

1 Exhibition Show Case.

Specimens:—Animals, birds, birds' eggs and nests, minerals and pressed plants.

Books:—Farm Weeds, Catalogue of Canadian Plants, several volumes. Catalogue of Canadian Birds, Bird Lore, 1 volume. Old Red Sandstone, (Miller.) Newspaper cuttings (Portfolio.)

LIST OF MEMBERS.

Alford, B. P.
Bouce, J. F.
Carswell, J. A.
Cassels, Mrs. W. A.
Cole, Miss
Galbraith, F. W.
Galbraith, Mrs. F. W.
George, Dr. H.
George, Mrs.
George, Miss.
Cottingham, Mrs.
Lord, W. E.
Lord, Mrs. W. E.
Michener, E., M.P.P.
Moore, Rev. C. W. G.
Munro, H. G.
Pamely, S.
Pamely, Mrs.
Summerby, Miss F.
Tallman, Mrs. F. H.
Wanless, Mrs.
Wilton, E.

RECEIPTS AND DISBURSEMENTS.

1911.				
Jan.	1	To balance at bank	$35.75	
Nov.	1	By postage		$ .75
1912.				
March	15	By printing re Prof. Boyce's lecture		3.50
March	15	By distributing bills re Prof. Boyce's lecture		1.00
April		By postage		.50
April	15	To grant from provincial society	10.00	
May	6	By postage		.25
June	10	By postage		.20
June	10	To subscriptions:		
		Alford, B. P.	.50	
		George, Dr.	.50	
		George, Mrs.	.50	
		Pamely, S.	.50	
		Pamely, Mrs.	.50	
		Summerby, Miss F.	.50	
		Wanless, Mrs.	.50	
		Wilton, E.	.50	
			4.00	

June	22	By livery, Cruickshank		10.00
Oct.	14	By books, Parker		4.00
Oct.	22	By printing, Advocate		2.50
Nov.	1	By balance at bank		27.05
			$49.75	$49.75

SOME NOTES OF A WINTER'S TRAMP UP SULPHUR MOUNTAIN, BANFF.

Paper prepared for the Red Deer Branch by E. N. Sanson, Esq., Curator National Park, Banff.

Naturally, one does not expect to see very much life on any of the mountains about Banff, during the winter months, outside of fur-bearing animals or the traces of them. But there are, during the milder weather in winter, certain interesting insects found on the snow of which I shall first make mention.

The Snow-Flea (Achorutes nivicola) of the order Thysanura, family Poduridas (spring tails and bristle tails.) The spring tails are very primitive and degraded insect forms and are all wingless, and undergo no metamorphosis. The mouth parts are quite rudimentary and retracted within the head, only the ends projecting. Their bodies are covered with scales, and they can adhere to surfaces. These spring-tails occur everywhere, under leaves, the bark of trees, under the surface of water and on mushrooms, and rarely live except in moist and shady places where their eggs are deposited. Some of the Podurids are prettily coloured and patterned. The scales are very minute and bear many fine lines and cross lines regularly arranged. On this account they are very much used as test objects for microscopes, the quality of the lens being determined by its capacity to reveal their extremely fine markings. Dr. L. O. Howard, in his book on insects says: "The Podurids are amongst the most abundant of insects, although, on account of their excessively small size, they do not attract attention. There are about six species in North America, and they are commonly found in deep soil which contains more or less humus, and have been taken in stiff clay sub-soil at a depth of six feet; but they probably penetrated to this depth by following the path of rootlets."

The Snow Flea (Achorutes nivicola) of this family is sometimes seen in great numbers leaping on the snow, mostly in spring and fall, but sometimes during milder weather in winter. I have seen many thousands on the surface of the snow on the trail of Sulphur Mountain. They simply covered the trail for 1500 feet more or less.

They leap vigorously to a considerable height and distance when alarmed, by means of a long appendage near the extremity of the body on the second from the last segment. This appendage is hooked, and, on being loosed, throws the insect high in the air. They also work their way under the snow by means of the minute openings—to what depth I am not aware. Comstock says the snow-flea is sometimes a pest where maple sugar is made, the insect collecting in large quantities in the sap. The immature specimens of a Podurid, perhaps Achorutes nivicola, are occasionally seen in yellow pollen-like masses on the snow and ice on Sulphur Mountain, both on the trail and on the top. They are snow-born, as their specific name implies. When I first saw one of these clumps of yellow matter, and before closely examining, I thought it was sawdust from a decayed tree, or the mycelium of some fungus. These immature specimens soon die if taken from their natural habitat. Both these and the mature insect are best kept in alcohol as specimens.

Boreus Californicus: Strange little, wingless, shining-black, leaping insects found on snow, of the order Mecoptera, scorpion-flies, family Panorpidae (or order Neuroptera, but not truly so.)

The front of the head is greatly elongated into a sort of beak, antennae slender, body less than ¼-inch long, simple eyes, ocelli absent.

The metamorphosis is complete. They are carnivorous. The female Boreus is wingless, the male having rudimentary wings, and both look something like minute wingless grasshoppers.

Boreus Californicus is the Pacific Coast species of about four species in North America. It occurs on the surface of the snow during winter in milder weather, and in spring or fall on Sulphur Mountain, also in the valley, but not so abundant, often quite numerous.

They leap and feign death when alarmed. I have taken specimens every winter month in different years, sometimes at temperatures several degrees below freezing point; good specimens can be made of them for the cabinet. These insects are often found with the Snow-flea and also with the following:

Snow-Fly Chionea Valga (Harris)—order Diptera, family Tipulidae (Crane Flies). Chionea is a curious wingless genus and is found on snow, has the balancers of the fly, and looks, with its long legs, not unlike a small harvest spider. I took it to be a spider on my first seeing it. The body is a sort of light chocolate brown, legs long, but not quite so fragile as those of the crane flies; walks with a more or less stately tread over the surface of the snow, sometimes rather rapidly. This Chionea is found on Sulphur Mountain, but in milder weather during winter. I have taken specimens every winter month (during different years), occasionally at temperatures several degrees below freezing point. The Chionea do not leap, but feign death like a spider. Valga is not found in any numbers.

Chionea Nivicola, Doane, a slightly larger species, light brown, rare on Sulphur Mountain. I have only taken about one dozen specimens in several years. This is also found on the snow. Both these Chionea shrivel up on drying, and make poor specimens for the cabinet. Aldrich's catalogue of diptera records only specimens from Pullman, Washington.

The above are practically all the real winter snow insects, but the following are found lively on the snow during spring and fall, March, April and May, and September, October and November in milder weather, and sometimes at temperatures below freezing point, still and active.

Chironomus, or midge species not altogether uncommon on the snow, and some Scatophaga species; all of the order diptera.

Of Coleoptera (Beetles).

Bombidium longulum (small Beetles) are found on snow fairly common.

Hydnobius Matthewsi, on snow September and October, a small beetle fairly common at times.

Species of Homolata of the Hemitera in spring and fall infest fungi, tolerably common.

An arctian caterpillar, larva of the beautiful little moth Neoarctia beani, some years in spring is seen. On May 4th, 1908, these caterpillars were fairly numerous on the snow on Sulphur Mountain, far away from what little exposed rock or soil there was, about 2500 feet elevation and moving rather actively.

Spiders are occasionally seen in winter, during milder weather, and other insects and larvae—some of the larvae falling from trees.

Of the animals I have seen but few different kinds in the winter though the tracks of several others are often numerous.

Of those seen, the snow-shoe rabbit or varying hare (Lepus Americanus) are at times very numerous and again being almost exterminated, as in 1909, 1910 by the nature of the winter and by disease. Ticks become so numerous in these rodents' ears as to cause weakness, when they are the more easily taken as prey and also die. They change to white about November, and to their summer hue of grayish or mauvish gray about May, and come about the hut. They are again increasing.

The common red squirrel (Sciurus Richardsoni), a few of which are seen with their tunnels under the snow to their stores of cones and fungi.

White footed or deer mouse (Peromyscus leucopus) by far the most abundant rodent or mammal on this or other mountains. Especially is it found in numbers on the top of Sulphur Mountain, and the observatory hut swarmed with them on one occasion. While remaining over night in the hut I caught with one trap one every ten or fifteen minutes, and calculated that about 40 or 50 different individuals came into the building during the night. They came in under roof openings; after considerable work this was stopped. They were very destructive, making very untidy nests of all sorts of material, and were apparently not particular as to their food, eating soap, putty, etc., with immunity. These mice do not, so far as I know, gnaw in order to get into buildings, but do more scrambling.

The shrew mouse, perhaps a different species, is also found on Sulphur Mountain. They come out in the coldest weather and have their openings through the snow. They are not averse from having a swim in icy water.

The mule deer are occasionally seen, and are, by the way, remarkably tame, and can be photographed without much bother at times.

The other animals whose tracks are often seen are the Canada lynx (lynx Canadensis), which with the rabbits become more or less numerous, the coyote, weasel, martin, and probably others at present unknown to myself.

Of the birds Richardson's Grouse sometimes startles one by suddenly flying up from under the snow on the trail. A friend of mine, who undertook one of my regular trips up to the hut, came down when it was quite dark, (being delayed by heavy work), and got quite a scare by one of these birds fluttering up almost in his face; not knowing what it was he wondered what was coming next. These are the larger birds of the grouse family, and live a good deal on the barberry, which carries its fruit through the winter, and is abundant on all the mountains.

The Canada Jay, with its mimicry, even to laughing, follows one from tree to tree in expectation of food. It builds in March.

Clark's crow disappears for a time, but is seen in the early winter and spring.

Pine grosbeaks are seen occasionally, a tame bird here at Banff. With these are also seen flocks of Bohemian waxwings, and I have seen a waxwing act as sentinel for both a flock of grosbeaks and waxwings, while feeding on the ground.

American crossbill occasionally seen.

Red Polls occasionally seen.

Brown Chickadees, a very inquisitive bird, seen fairly often, with a few different species of woodpeckers.

The Ptarmigan is most of a valley bird in winter.

I might have made these notes to cover a paper including the mountains in the vicinity of Banff proper, the extra animals would then include goats, and sheep.

ANNUAL REPORT OF THE INNISFAIL BRANCH.

Ladies and Gentlemen,—I beg to present the following report for the Innisfail Branch:

Since the deferred annual meeting last June, I have made one or two attempts to get a meeting, but as so many of our members have left town, I found it impossible to do so. Some of our members have done a little field work, but in the absence of a secretary this has not been tabulated and is not available at this time. It is my intention to call a meeting early in the new year with the purpose of definitely finding out whether or not it is worth while to try to keep the branch going.

We have a small library of 12 volumes made up as follows:

3 volumes Standard Library of Natural History.
1 copy American Animals.
1 copy Lydekker on Birds. Vol. IV.
1 copy Color Key to N. American Birds.
1 copy Mountain Wild Flowers of Canada.
1 copy How Minerals Occur.
3 handbooks, 1 each Land Birds, Water Birds, Wild Flowers.

The following is a list from memory of remaining members:

Rev. J. S. Short.
Mrs. A. E. Keast.
Mr. D. G. Geary.
Rev. and Mrs. M. T. Habershon.
Mr. and Mrs. Wm. Geary.
Mr. Jas. Jenson.

Our cash balance in the bank at present is $8.13.

Regretting that we have not been able to make a better showing, I am,

Yours very sincerely,

W. M. GEARY,
President.

ANNUAL REPORT OF THE ERSKINE BRANCH.

Dear Sir,—Following is the annual report of the Erskine Branch of the Natural History Society:

Yearly officers: Mrs. S. S. Judd, President; Mrs. R. C. Parker, Vice-President; Mrs. C. B. Morton, Secretary-Treasurer.

Yearly work: Elementary study of birds, flowers, bugs and geology
Yearly income: $10.00 grant; $4.50 membership fees.
Expenditures: Nothing.
Liabilities: Nothing.
Assets: $31.28. Members in good standing, nine

Yours truly,

BESSIE HUGHES,
Secretary Pro Tem.

ELECTION OF OFFICERS.

The election of officers for 1913 resulted as follows:

Hon. President: Honourable Duncan Marshall.
Hon. Vice-Presidents: Mr. George Harcourt and Mr. Michener
President: Mr. R. E. Fiske, Hillsdown.
Vice-Presidents: Dr. H. George, Mr. Geary, Mrs. Judd.
Secretary-Treasurer: Rev. J. S. Shortt, Innisfail.

EXECUTIVE COMMITTEE.

N. B. Sanson, Banff; Mrs. Dr. George, Red Deer; Mrs. Keast, Innisfail; Mrs. Tallman, Red Deer; Mrs. Cottingham, Red Deer; Mrs. Hughes, Erskine; Mrs. Geary, Innisfail; Mr. Munroe, Red Deer; Mrs. Greene, Red Deer.

J. S. SHORTT,
Secretary-Treasurer.

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